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Supreme Court of the United States,

OCTOBER TERM, 1926.

No. 357.

ALBERT OTTINGER, AS ATTORNEY GENERAL OF THE STATE OF NEW YORK,

Appellant,

against

CONSOLIDATED GAS COMPANY OF NEW YORK,

Appellee.

BRIEF FOR APPELLEE,

upon features of the legislation rendering the Act invalid, aside from the confiscatory effect of the rate.

SHEARMAN & STERLING,
Solicitors for Appellee,
55 Wall Street,
New York.

JOHN A. GARVER,
Of Counsel.

SUBJECT INDEX.

PAGE

PRELIMINARY STATEMENT..... 1

POINTS.

FIRST. Indefensible legislation..... 9

SECOND. Further characteristics of this legislation... 14

THIRD. Statute presumptively invalid..... 17

FOURTH. Statute invalid on ground of estoppel..... 20

FIFTH. Compliance with the Act impossible, dangerous and criminal..... 24

SIXTH. Unreasonable character of Act and impossibility of performance render it invalid..... 27

SEVENTH. Provision as to the quality of gas not severable 29

EIGHTH. Denial of the equal protection of the law.. 31

NINTH. Excessive penalties render the Act void.... 33

TENTH. Penalty provisions not severable..... 36

ELEVENTH. The Attorney General cannot question findings relating to rates and standards of gas... 38

TWELFTH. The findings of fact should be accepted as conclusive 42

THIRTEENTH. *Stare decisis*..... 43

FOURTEENTH. The statute should be declared void, without regard to its confiscatory character, and the decree appealed from should be affirmed.... 44

APPENDIX 45

LIST OF CASES.

	PAGE
Adamson *v.* Gilliland, 242 U. S., 350, 353	42
Arkadelphia Co. *v.* St. Louis, S. W. R. Co., 249 U. S., 134, 141	41
Atlantic Coast Line *v.* Commission, 206 U. S., 1, 19	20
Atlantic Coast Line *v.* Goldsboro, 232 U. S., 548, 555	41
Bayne *v.* United States (C. C. A.), 195 Fed., 236	22
Banton *v.* Belt Line Ry., 268 U. S., 413, 418, 422	17, 40
Bronx Gas & El. Co. *v.* Prendergast, 1 Fed. (2d), 377, 379	7, 14
Bronx Gas & El. Co. *v.* Commission, 208 App. Div. 780, 806	8
Brooklyn Union Gas Co. *v.* Prendergast, 7 Fed. (2d), 628	7
Burns Baking Company *v.* Bryan, 264 U. S. 504, 515-16	27
Butts *v.* Merchants Transportation Co., 230 U. S., 126, 138	29
Chesapeake and Ohio Railway Co. *v.* Conley, 230 U. S., 513	35
City of Troy *v.* United Traction Co., 202 N. Y., 333, 340	19
Consolidated Gas Co. *v.* City of New York, 157 Fed., 849, 881	34
Consolidated Gas Co. *v.* Mayer, 146 Fed., 150, 152-5	34
Consolidated Gas Co. *v.* Newton, 267 Fed., 231; 274 Fed., 986	6
Cotting *v.* Kansas City Stockyards, 183 U. S., 79, 101	34
Darnell *v.* Edwards, 244 U. S., 564	17
Davis *v.* Schwartz, 155 U. S., 631, 637	42
Denver *v.* Denver Union Water Co., 246 U. S., 178, 181-2	42
Ex parte Young, 209 U. S., 123	34

PAGE

In re Engelhard, 231 U. S., 646 38
Interstate Commerce Commission *v.* Railway Co., 167 U. S., 479, 505 19
Iowa *v.* Creighton (C. C. A.), 191 Fed., 270 22

Kimberly *v.* Arms, 129 U. S., 512, 524, 525 42
Kings County Lighting Co. *v.* Nixon, 268 Fed., 143, 150 14
Kings County Lighting Co. *v.* Prendergast, 7 Fed. (2d), 192, 218 ..... 7, 28

Lake Erie & Western R. Co. *v.* State Pub. Utilities Comm., 249 U. S., 422, 424 41
Live Oak Association *v.* Railroad Commission, 269 U. S., 354, 356 ..... 21, 41

Matter of Janvrin, 174 Mass., 514 23
Medsker *v.* Bonebrake, 108 U. S., 66, 72 42
Morrell *v.* Brookiyn Borough Gas Co., 231 N. Y., 398 11
Municipal Gas Co. *v.* Public Service Commission, 225 N. Y., 89, 96 ..... 9, 40
Mutual Gas Co. *v.* Newton, 269 Fed., 452 11

Newton *v.* Consolidated Gas Co., 258 U. S., 165, 168, 174, 175-6 ..... 6, 15, 30, 40, 43
New York *v.* Consolidated Gas Co., 253 U. S., 219 ... 6
New York City *v.* N. Y. Telephone Co., 261 U. S., 312, 315 ..... 38, 39
N. Y. & Queens Gas Co. *v.* Prendergast, 1 Fed. (2d), 351, 354, 375; 268 U. S., 708 ..... 7, 14, 15, 18, 23, 31
N. Y. & Richmond Gas Co. *v.* Prendergast, 10 Fed. (2d), 167 7
N. Y. & Richmond Gas Co. *v.* Nixon, 203 App. Div., 861; 204 App. Div., 838, 894 8

Oklahoma Operating Co. *v.* Love, 252 U. S., 331 35

Pearsall *v.* Great Northern Ry., 161 U. S., 646, 662-3 .. 21
People *ex rel.* Met. St. Ry. *v.* Tax Commissioners, 174 N. Y., 417, 437-8 18

PAGE

People *ex rel.* Municipal Gas Co. *v.* Pub. Svce. Com., 224 N. Y., 156 10

Railroad Commission Cases, 116 U. S., 307, 336 20

Smith *v.* Illinois Bell Telephone Co., U. S., ; 46 Sup. Ct. Rep., 408, 409-10 ..... 20, 38, 39

South Covington Railway *v.* Covington, 235 U. S., 537, 548-9 27

State of Indiana *v.* Milk, 11 Fed., 389 ..... 21, 22

United States *v.* Stinson, 125 Fed., 907, 910; aff'd. 197 U. S., 200 22

United States *v.* Willamette, etc., Co., 54 Fed., 807, 811 21

Vicksburg *v.* Vicksburg Water Works Co., 206 U. S., 496, 508 ..... 20, 21

Village of Saratoga Springs *v.* Saratoga Gas Co., 191 N. Y., 123, 143, 144, 149-150 ..... 9, 16, 17, 20, 23, 31

Wadley Southern Ry. *v.* Georgia, 235 U. S., 651, 662-4. 34, 35

Whitehall, etc., Co. *v.* Atlantic, etc., Co., 160 App. Div., 208, 211 22

Wichita Railroad *v.* Public Utility Commission, 260 U. S., 48, 58-9 20

Willcox *v.* Consolidated Gas Co., 212 U. S., 19, 21, 49, 53, 55 ..... 6, 10, 28, 30, 34, 36, 40

Woodruff *v.* Trapnell, 10 How., 190 21

STATUTES.

Laws of 1923, Ch. 899 (*the statute in question*) 2

Executive Law, Section 68 39

Laws of 1890, Ch. 566, Sec. 70 (Appendix) 45

Laws of 1897, Ch. 385 (Appendix) 45

Laws of 1906, Ch. 125 (Appendix) 46

Public Service Commission Law (*Copies submitted with briefs*).

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No. 357.

ALBERT OTTINGER, as Attorney General of the State of New York,
Appellant,

AGAINST

CONSOLIDATED GAS COMPANY OF NEW YORK,
Appellee.

BRIEF FOR APPELLEE, upon features of the legislation rendering the Act invalid, aside from the confiscatory effect of the rate.

Reported below, 6 Fed. (2d), 243.

Preliminary Statement.

Appeal by the Attorney General of the State of New York from a final decree of the United States District Court for the Southern District of New York, entered on May 7, 1925, upon the direction of Hon. Francis A. Winslow, *D. J.*, adjudging an Act of the New York Legislature void as against the appellee, the Consolidated Gas Company of New York.

The parties defendant in the District Court were the Public Service Commission and the Attorney General. *The*

Commission has not taken an appeal, but only the Attorney General.

The Act (L. 1923, Ch. 899), which was an amendment of the Public Service Commission Law, took effect on June 2, 1923, and was as follows:

> "AN ACT *to amend the public service commission law, in relation to the charge for illuminating gas in cities containing a population of one million or over.*
>
> Became a law June 2, 1923, with the approval of the Governor. Passed, three-fifths being present.
>
> *The People of the State of New York, represented in Senate and Assembly, do enact as follows:*
>
> Section 1. Chapter four hundred and eighty of the laws of nineteen hundred and ten, entitled 'An Act in relation to the public service commission and the transit commission constituting chapter forty-eight of the consolidated laws,' is hereby amended by inserting therein a new section, to follow section sixty-seven, to be section sixty-seven-*a*, to read as follows:
>
> § 67-*a*. *Charge for gas in cities of one million or more.* A gas corporation engaged in the business of manufacturing, furnishing or selling illuminating gas in a city containing a population of one million or over shall not charge or receive for gas furnished or sold in such city a sum per one thousand cubic feet in excess of one dollar, nor furnish in such city gas of a standard less than six hundred and fifty British thermal units per cubic foot, measured under normal conditions of temperature and atmospheric pressure. The public service commission, notwithstanding any other provision of this chapter, shall not allow a rate or charge in the case of such cities in excess of such sum.
>
> § 2. *This act shall take effect immediately.*"

New York City is the only city in the State having a population of "one million or over" (R. 73).

This Act was declared void by the Court below (Winslow, *J.*), because:

> 1. The Legislature was not at liberty to disregard orders of the Commission, then in force, with which the

Company had duly complied, at great expense of time and money.

2. It was impossible to comply with the statutory requirement of an immediate change in the standard of gas; and the standard prescribed by the Act was an essential part of the rate.

3. The prescribed rate was confiscatory.

Judge Winslow had previously considered and discussed this statute, in the suits brought by the New York and Queens Gas Company (1 Fed. (2d), 351), and the Bronx Gas and Electric Company (1 Fed. (2d), 377), in which the Act was declared void for the reasons above stated; and, in the case at bar, he refers to his opinions in those cases (R. 320-1). As hereafter shown (*post*, p. 7) the appeals to this Court in those cases have not been prosecuted.

There are also additional grounds upon which the final decree herein should be sustained, which will presently be considered.

By two orders entered by the Public Service Commission on August 30, 1922, after an investigation of the question of rates and the standard or quality of gas to be supplied, the rate established for the Consolidated Gas Company was $1.15 per thousand cubic feet, for gas containing a minimum of 537 heat units per cubic foot, averaged on a monthly basis. These orders took effect on October 1, 1922. The order fixing the rate was to continue in force for one year and until changed by further order of the Commission (R. 47). The order prescribing the standard was made after extended hearings, at which all the gas companies in the Metropolitan area were represented, as well as the City of New York by its Corporation Counsel, various industrial, community and individual consumers, the Merchants Association, etc. The order is most elaborate in its specifications of the kind and quality of gas to be supplied and the pressure to be observed; and its provisions were clearly intended to be permanent, as

the Commission, by further orders, made the standard uniform throughout the State (R. 2303-4). The care which the Commission exercised in making this order is obvious in its recitals and particularly in the accompanying opinion, a copy of which is annexed to the complaint herein (R. 30).

The order prescribing the standard contained the following recital (R. 49):

> "the Commission being now of the opinion that the standard of 22 candle power, prescribed by Chapter 736 of the Laws of 1905 and Chapter 125 of the Laws of 1906, as amended, is unreasonable, uneconomical and improper, and that the continuance of such a standard would not be in the public interest, and that a standard of quality and measurement, based upon the heating power of gas, as hereinafter more particularly specified, should now be fixed by the Commission, . . ."

And, in its opinion (Exhibit 210), the Commission said (R. 38):

> "In respect to the standard of gas to be furnished, enough has already been said to indicate the advisability of a uniform standard for the State of New York. The elaborate report which the Commission has prepared, and which will be spread upon its records, indicates clearly that the illuminating standard is an obsolete and uneconomical standard, and that better (because more uniform) service is obtainable through a calorific or heat standard. The facts concerning the relative merits of these standards have been incorporated in the record through the examination of witnesses, men of eminence in the gas business, who were representatives of public utility commissions of other states which have changed from the candle-power to the calorific standard, and others directly concerned in the regulation and management of extensive gas enterprises. The testimony of these men, covering as it has every phase of the question of standards used, appears to the Commission conclusive upon this question. The evidence taken in Case No. 108 shows that the B. t. u. standard, in addition to improving the efficiency in the use of gas by the consumers, will also effect certain economies in the cost of

operation. The Commission feels that such economies in operating cost should, at this time, inure to the benefit of the consumers."

No attempt was made in the Court below to question the correctness of the facts thus stated; and among the witnesses referred to was Mr. Phillips (R. 2225-7), who was formerly employed in the National Bureau of Standards (R. 2220).

This Act of June 2, 1923, which took effect "immediately", was passed while the said orders of the Commission were still in force; and it not only annulled those orders, but prescribed a rate and standard in complete disregard of the principles embodied in the orders.

On the day when the Act took effect, the Company obtained a temporary restraining order against its enforcement (R. 169); and this restraint was continued, *pendente lite*, by the Statutory Court (Circuit Judges Rogers and Hough and District Judge Bondy), which continued the rate and standard prescribed in the orders of the Commission. The decision of the Statutory Court was announced from the bench, upon the close of the oral argument.

Thereafter, Mr. James G. Graham, a master of experience in rate and other litigation (the Special Master in the Brooklyn Union Gas case, whose conclusions were approved in the previous litigation (258 U. S., 604), was appointed to take the evidence and report. His report was confirmed by Judge Winslow in the District Court (R. 322; 6 Fed. (2d), 243).

The Public Service Commission took an active part in the proceedings in the lower Court; but, as above stated, it has not joined in an appeal to this Court; and the decree is, of course, conclusive against it.

The limited right of the Attorney General to be heard in the appeal taken by him, will be referred to hereafter (*post*, p. 38).

Previous rate cases in this Court in which the Consolidated Gas Company was a party.

I. Willcox *v.* Consolidated Gas Co., 212 U. S., 19 (January 4, 1909).

Suit brought by the Gas Company to have the Eighty-cent Act of 1906 (L. 1906, Ch. 125) declared void. Final decree in favor of the plaintiff in the lower Court (146 Fed., 150; 157 Fed., 849).

This Court, while holding that a return of less than 6% would be confiscatory, thought that the return shown was so close to 6% that the Company should make a practical test of the statute; and it accordingly directed the complaint to be dismissed, without prejudice (212 U. S., 55).

II. Newton *v.* Consolidated Gas Co., 258 U. S., 165 (March 6, 1922).

Suit commenced by the Company in January, 1919, to have the same Eighty-cent Act of 1906 declared void. Decision in the lower Court in favor of the plaintiff.

Consolidated Gas Co. *v.* Newton, 267 Fed., 231; 274 Fed., 986.

The City of New York was not allowed to intervene in that litigation.

New York *v.* Consolidated Gas Co., 253 U. S., 219.

It, however, succeeded in taking an active part in the litigation, by having the Corporation Counsel substituted as solicitor for the District Attorney of New York County, who had been made a party (260 Fed., 244); and it took part in the appeal to this Court (258 U. S., 169).

The commanding position of the Consolidated Gas Company among the gas companies of the country was referred to in the opinion of this Court in the original Eighty-cent gas case (212 U. S., 19, 49). The Company operates in the Boroughs of Manhattan and the Bronx, which formerly comprised the entire City of New York. It has about 1,000 miles of mains (Plff.'s Exhibit 268), supplies more than 550,000

consumers (R. 762), and, in 1923, had a gross operating income of more than $25,000,000 (R. 2334).

All this has made the Company a shining mark for political activities in the Legislature at Albany; and as the legislation could not be directed against the Consolidated Gas Company alone, it became necessary to include other and less conspicuous companies.

The Act complained of, which indiscriminately required the same charge to be made by every gas company in every one of the five Boroughs of the City of New York, without regard to the nature of their territory or operating conditions, has been attacked by every company affected and has been declared void in every instance.

Litigation over the present Act of 1923.

The first case to be brought to trial under the Act of June 2, 1923, was that of the New York and Queens Gas Company (N. Y. & Queens Gas Co. *v.* Prendergast, 1 Fed. (2d), 351).

An appeal to this Court was taken by the Attorney General, but was dismissed, on motion of the Gas Company (268 U. S., 708).

The second case in which the Act of 1923 was declared void was that brought by the Bronx Gas and Electric Company (Bronx Gas & El. Co. *v.* Prendergast, 1 Fed. (2d), 377).

An appeal to this Court was taken by the Attorney General; but it has not been prosecuted, and a motion has been made to dismiss it.

Both Companies are subsidiaries of the Consolidated Gas Company (R. 74-5).

Other cases reported in which the Act of 1923 has been declared void, were those brought by the Brooklyn Union Gas Company (7 Fed. (2d), 628) and by the Kings County Lighting Company (7 Fed. (2d), 192), both now before this Court; N. Y. & Richmond Gas Co. (10 Fed. (2d) 167, where the Statutory Court, upon preliminary injunction, author-

ized the continuance of the $1.45 rate previously fixed by the Commission. No appeal has been taken in that case.

The dollar rate established by the Legislature in 1906 for the Boroughs of Richmond and the Bronx had previously been declared confiscatory by the New York State Courts.

N. Y. & Richmond Gas Co. *v.* Nixon, 203 App. Div. 861, 204 App. Div. 838, 894;

Bronx Gas & El. Co. *v.* Commission, 208 App. Div. 780, 806.

Scope of present brief.

The present brief is limited to an attack upon the Act of 1923, on general grounds (other than its confiscatory effect on the appellee) applicable to all the companies; and the attention of the Court will also be called to the fact that the Attorney General has no standing to question the findings of fact made by the lower Court, and acquiesced in by the Public Service Commission through its failure to take an appeal to this Court. The main points discussed in this brief and the general sequence of the discussion are shown in the Subject Index.

The facts and incidental questions of law involved in determining the rate base and the return upon it will be treated in a separate brief, showing the rate to be confiscatory as to the appellee.

POINTS.

FIRST.

Indefensible legislation.

Chapter 899 of the Laws of 1923 is a disgraceful chapter in the history of legislation. It is the culminating act, in the regulation of gas companies in the City of New York, of political interference with the legitimate functions of the Public Service Commission. It was passed in utter disregard of what has been the fundamental principle of regulation. By it, the Legislature nullified carefully considered orders of its own Commission then in full force, and disregarded facts shortly before found by this Court; while the requirements of the Act would have necessitated criminal disregard of life and property, if the gas companies had been able to comply with them. A brief historical review will make this clear.

I. In the regulation of public utilities by the creation of a Commission with broad powers, the object must be the protection of the utilities as well as the public.

> Village of Saratoga Springs *v.* Saratoga Gas Co., 191 N. Y., 123.

If the Commission is given power over the rates charged, it should have power to increase the rates as well as to reduce them; for changes in economic conditions necessitate corresponding changes in rates.

> Municipal Gas Co. *v.* Public Service Commission, 225 N. Y., 89, 96.

The Public Service Commission Law was passed in 1907 (L. 1907, Ch. 429), under the leadership of Governor Hughes. As originally enacted, it gave the Commission full power to

increase rates, as well as to reduce them. In 1906, a year before its passage, the Consolidated Company commenced a suit in the Federal District Court, to have the maximum rate of eighty cents, established by L. 1906, Ch. 125 (Appendix, p. 46), declared confiscatory and void. Ultimately, that case reached this Court and was decided early in 1909 (212 U. S., 19). Knowing that the Consolidated Company was then at liberty to appeal to the Commission for an increase in the rate, the Legislature, at its next session, amended the Public Service Commission Law, by inserting a provision in it which prevented the Commission from establishing a rate in excess of any maximum rate fixed by the Legislature itself (L. 1910, Ch. 480, Sec. 72):

> "After a hearing and after such an investigation as shall have been made by the Commission . . . the Commission, within lawful limits, may by order fix the maximum price of gas or electricity, *not exceeding that fixed by statute.*"

II. That limitation remained unchanged until 1921, when it was finally repealed, at the instance of Governor Miller (L. 1921, Ch. 134, Sec. 72); and it made it impossible for the gas companies to obtain any relief meantime from the Commission.

> People *ex rel.* Municipal Gas Co. *v.* Pub. Svce. Com., 224 N. Y., 156.

This Court held that even under the economic conditions existing at that time (1906), the Consolidated Company was barely able to earn 6% on the value of its property devoted to the public use; and it remanded the case, without prejudice, to enable the Company to make an actual trial of the rate.

> Willcox *v.* Consolidated Gas Co., 212 U. S., 19, 55.

In spite of the revolutionary changes in economic and industrial conditions wrought by the world war, and the enormous increase in the cost of labor and materials, the New York Legislature refused to lift this ban on the powers of the Commission. The Consolidated Company, unable to

appeal to the Commission for relief, was then forced into the courts for the second time. In 1922, this Court promptly and unanimously declared the Eighty-cent Act unconstitutional, not only as to the Consolidated Company, but also as to every other gas company in the City of New York whose case had been brought before the Court (258 U. S., 165; 178; 180; 604).

Those Companies (nine of them) which had not been brought into this Court had obtained relief from the Statutory Court, which permitted them to make a charge, *pendente lite,* of $1.10, instead of eighty cents.

Mutual Gas Co. *v.* Newton, 269 Fed., 452.

III. In the case of the Consolidated Company, the District Court, in its final decree entered August 11, 1920, allowed the Company to make a charge of $1.20 (a 50% increase over the eighty-cent rate) pending the appeal. In the New York and Queens case (a subsidiary of the Consolidated Company in the Borough of Queens), the District Court found that, making every allowance in favor of the defendants, the operating expenses alone were about $1.29 (269 Fed., 277, 290-1). The decision in that case was unanimously affirmed by this Court, on March 6, 1922 (258 U. S., 178); and, at that time, this Court took judicial notice of the "enormous increase in cost of labor and materials", which had taken place in recent years (258 U. S., 165, 174).

IV. The decision of this Court, holding the Eighty-cent Act confiscatory, left the Company free to establish a new schedule of rates.

Morrell *v.* Brooklyn Borough Gas Co., 231 N. Y., 398.

Meantime, as above stated, the restriction on the power of the Commission to fix a rate greater than eighty cents had also been repealed (L. 1921, Ch. 134); and the matter of a new schedule of rates was then taken up with the Commission,

during the summer of 1922. At the same time, the subject of a change in the standard of gas from an illuminating to a calorific content was investigated. This Court, in its opinion in the Consolidated case, recognized that, with the introduction of the electric light, the calorific quality had become more important to consumers than the illuminating one (258 U. S., 176).

As the result of these investigations, the Commission, on August 30, 1922, made the orders heretofore referred to (*ante,* p. 3), permitting a charge of $1.15 to the Consolidated Company, and a greater charge to some of the other Companies; and it adopted the standard of not less than 537 British thermal units, within certain variations, on a monthly basis. These orders were to become effective on October 1, 1922, and were to continue in force for one year and until changed by the Commission (Master's Rep., pars. 25, 28, R. 161, 165).

V. The Consolidated Company signified its acceptance of the orders, upon condition that the rate and standard should continue for at least a year (R. 166); and it proceeded to carry them into effect (R. 335; Master's Rep., par. 32, R. 166, not excepted to). The change in the standard of gas necessitated a readjustment of 983,000 appliances (R. 910; do., par. 114, R. 209, not excepted to). That change in the appliances cost the Company a large sum of money ($196,000) and required more than six months for its completion (do., par. 31, R. 167, not excepted to).

VI. No sooner had this change in the appliances been made than the Legislature passed the Act now complained of, reducing the price of $1.15 fixed by the Commission to $1, and not merely restoring the equivalent of the obsolete and discredited 22 candle power standard, but requiring an even richer illuminating gas to be furnished; for 22 candle gas represents roughly only about 628 thermal units (R.

1205). In prescribing a thermal content of at least 650 British thermal units, the Legislature exceded all other thermal unit standards for manufactured gas throughout the civilized world, as nowhere else is the standard higher than 600 (7 Fed. (2d), 192, 207); and to attempt to supply gas of that quality throughout the City of New York would require an initial quality, in cold weather, of 700, owing to the condensation of the hydrocarbons or illuminants contained in a highly enriched gas (R. 1122, 1130-1).

VII. This statute took effect upon the instant of its approval by the Governor, on June 2, 1923 (L. 1923, Ch. 899; *ante,* p. 2). It not only reduced the maximum charge to be made, but *it prohibited the Commission from increasing it,* and it required an instantaneous revolutionary change in the standard.

SECOND.

Further characteristics of this legislation.

I. Blind to facts known of everyone, this reckless Legislature not only reduced the price fixed by the Commission and restored what it supposed was the equivalent of the discredited and wasteful candle power standard; but it went to much greater lengths. Its wilful folly is strikingly exposed in the fact that the dollar rate is made applicable, without regard to the wide variations in physical and operating conditions, to every gas company in the five Boroughs of the City of New York: to the rural and undeveloped districts in the Boroughs of Queens (New York & Queens Gas Co. *v.* Prendergast, 1 Fed. (2d), 351, 354), Richmond and the Bronx (Bronx Gas & El. Co. *v.* Prendergast, 1 Fed. (2d), 377, 379), as well as to the thickly settled and highly developed Boroughs of Brooklyn and Manhattan. In the previous gas litigation, in 1920, in which the 1906 Act was declared to be confiscatory, Hough, *C. J.*, referring to the Kings County Lighting Company, employed language which may appropriately be applied to the New York and Queens Gas Company and to other gas companies in the sparsely settled portions of all the five Boroughs, except only Manhattan (Kings County Lighting Co. *v.* Nixon, 268 Fed., 143, 150):

> "Although legally and nominally in a great city, this particular gas maker is in reality operating in a country town."

II. Never before had the New York Legislature been guilty of such glaring folly. Never before had it so completely disregarded obvious facts. In the Queens Gas case (the first case in which this 1923 statute was held to be invalid), the Statutory Court permitted a *pendente lite* charge of $1.38; and the Special Master declared that a rate of $1.45 to $1.50 was necessary for adequacy (1 Fed. (2d), 351, 366).

From the decree entered in the Queens case, an appeal was taken to this Court by the Attorney General, which, as heretofore stated, was subsequently dismissed, on motion of the Company (268 U. S., 708).

In Newton *v.* Consolidated Gas Co. (258 U. S., 165, 174, this Court referred to the fact that subsequent to the repealing Act of 1921, the Commission had authorized a rate of $1.40 for one of the companies that had been subject to the 80¢ rate.

When the Commission, by its order taking effect on October 1, 1922, established a maximum rate of $1.15, it expressly stated that this "could hardly be deemed adequate if based only upon present conditions"; but it was hopeful that better conditions would prevail (R. 44; Master's Rep., par. 26, R. 163); a pious hope, not yet realized.

III. In the Eighty-cent Act of 1906 (L. 1906, Ch. 125; Appendix, p. 46), which was so unjustly kept on the statute book until 1921 (258 U. S., 165), the maximum charge of eighty cents was applicable only to the Borough of Manhattan and to specified portions of the Boroughs of Brooklyn, Queens and the Bronx; while, in other portions of these Boroughs, the maximum charge allowed ranged from $1 to $1.25. In an earlier statute (L. 1890, Ch. 566, Sec. 70; Appendix, p. 45), a similar distinction was observed, the charge permitted for Manhattan having been $1.25, while for the Bronx it was $1.60. And, again, in the Act of 1897, which preceded the Act of 1906, the price allowed in the then City of New York was, at the outset, $1.20; but it was expressly provided that this should be limited to existing territory, and should not apply to territory subsequently acquired (L. 1897, Ch. 385; Appendix, p. 45).

IV. In the Queens Gas case (1 Fed. (2d), 375), Judge Winslow said:

> "The present enactment followed close on the heels of court decisions."

It was in disregard of those decisions and in disregard of the "period of repose during which the rate should remain stable", which the New York Court of Appeals has held to be one of the essentials of a valid Commission Law.

> Village of Saratoga Springs *v.* Saratoga Gas Co., 191 N. Y., 123, 149.

But the New York Legislature did not intend to give any repose to gas companies in the City of New York.

V. Not only did this Legislature reduce the price established by the Commission, but, by changing the standard and requiring a higher illuminating content, it added very materially to the cost of the manufactured gas; because, it required the addition of a large amount of gas oil (R. 1124, 1902), which meant an addition to the cost of the gas, amounting to about 4.95 cents per thousand cubic feet for gas made and 5.19 cents for gas sold (R. 109, 1129), while the general efficiency of such gas to the consumer would be greatly reduced (R. 1131).

VI. A serious consequence of these legislative incursions into the domain of the Public Service Commission, with the utter disregard of the standard of gas established by the Commission, is that the Companies are unable to provide intelligently for the inevitable extensions of their manufacturing facilities (Little, Appellant's expert, R. 1888). A plant for the manufacture of coal gas must be designed in a very different manner from a plant intended for the manufacture of water gas; and if the quality of gas to be supplied is changed from year to year, not only are the companies greatly embarrassed in their efforts to provide for the growth of their business with the increasing population, but the added cost of recurring changes in the manufacturing processes is a heavy burden ignorantly and wastefully thrown upon the consumers.

THIRD.

Statute presumptively invalid.

The ordinary presumption in favor of the constitutionality of a statute does not apply in the present case.

I. The two orders of the Commission, fixing a maximum rate for gas of a specified quality, taking effect on October 1, 1922, and continuing for one year and until changed by the Commission, were presumptively reasonable and valid.

Darnell *v.* Edwards, 244 U. S., 564;
Banton *v.* Belt Line Ry., 268 U. S., 413.

In Darnell *v.* Edwards, this Court said (p. 567):

> "It is well established that, in a question of rate making, there is a strong presumption in favor of the conclusions reached by an experienced body, after a full hearing."

And in Banton *v.* Belt Line Ry., the Court said (p. 422):

> "The presumption is that the order was reasonable and valid, and the burden was on the appellee to establish its invalidity."

II. The conclusions reached by a Public Service Commission, with many years' experience, are necessarily entitled to much greater weight than the uninformed and hasty action of a passing legislature which has ignored those conclusions. The fundamental reason for the creation of such Commissions would fail, if their decisions were continually interfered with and disregarded by the legislature which created them. It was partly because it was impossible for the legislatures to give the attention required for the regulation of public utilities that the appointment of Commissions for that purpose has been sustained by this Court, as well as by the New York Court of Appeals.

Village of Saratoga Springs *v.* Saratoga Gas Co., 191 N. Y., 123.

In the course of the opinion of Cullen, *Ch. J.*, in the Saratoga case, it was said (p. 144):

> "Any close approximation to a reasonable tariff would require special rates to be prescribed for many different localities. To do this properly would involve an investigation into the particular facts in each case. There was a time in the history of this country when carriers and public service corporations were so few that the legislature itself might have performed that labor. But by reason of the rapid growth of population and the great increase in the number of such corporations, it has become impracticable for the legislature to discharge that duty. Moreover, many rates may require alteration from time to time. That the most appropriate method (speaking from a practical, not necessarily constitutional point of view) is the creation of a commission or body of experts to determine particular rates has been said several times in the opinions rendered by the Supreme Court of the United States in the various railroad commission cases and in those of state courts."

A similar reason was given by the Court of Appeals for sustaining the Special Franchise Tax Law, by which a Tax Commission was appointed to value such franchises.

> People *ex rel.* Met. St. Ry. *v.* Tax Commissioners, 174 N. Y., 417, 437-8.

The advantages of a commission were admirably stated by Judge Winslow, in the Queens Gas case (1 Fed. (2d), 351, 375):

> "It would seem that a distinct advance had been made in the control of public utility corporations when a public service commission was created having facilities for investigation, deliberation and regulatory control of these bodies, functioning with the aid of experts throughout the year, as contrasted with a legislative body functioning for a brief period and concerned with the complex multiplicity of questions affecting the state and its divisions and citizens."

III. In City of Troy *v.* United Traction Co. (202 N. Y., 333, 340), the Court said:

> "The public service commission was established, among other things, for the purpose of promoting *uniformity and consistency* in authoritative directions to be given to public service corporations and to constitute a tribunal trained to consider and determine controversies and problems relating to such corporations and to direct and supervise their relations to and dealings with the public as their patrons. A construction of the Public Service Commission Law that would permit any municipality to disregard and set at naught the orders of the public service commission in cases like the one now before us would not only cause confusion of authority but would make of no effect some of the work of the commission for the doing of which it was established."

The Act of 1923, in destroying "uniformity and consistency", defeats one of the essential purposes of the Public Service Commission Law.

IV. In Interstate Commerce Commission *v.* Railway Co. (167 U. S., 479, 505), Mr. Justice Brewer, writing for the Court, referred to the legislative power to prescribe rates as one of "supreme delicacy and importance". The New York Legislature was evidently of a different mind when it passed the Act of 1923. Many of its members, representing rural districts throughout the State, were necessarily ignorant of conditions in New York City. The statute was passed without any investigation whatever, without conferring with the Commission and in utter disregard of the orders of the Commission then in force, although the Public Service Commission Law shows clearly that it was intended that the Commission should be used as the source of information for legislative action in such cases (Sec. 16, subd. 2).

V. It would be impossible to characterize this flagrant action of the Legislature in more appropriate language than that employed by Mr. Justice Sutherland, in the very recent

decision of this Court, in Smith *v.* Illinois Bell Telephone Co. (U. S., ; 46 Sup. Ct. Rep., 408, 409-10):

> "It is just to say that without explanation, its conduct evinces an entire lack of that acute appreciation of justice which should characterize a tribunal charged with the delicate and important duty of regulating the rights of a public utility with fairness to its patrons but with a hand quick to preserve it from confiscation."

VI. As between the orders of the Commission and the statute, the presumption of validity is surely in favor of the former.

FOURTH.

Statute invalid on ground of estoppel.

The principle of estoppel prevented the Legislature from passing the Act in question.

I. It is now elementary, that public utilities are subject to state regulation and that this may be exercised directly, or through municipal or other administrative bodies.

Railroad Commission Cases, 116 U. S., 307, 336;
Atlantic Coast Line *v.* Commission, 206 U. S., 1, 19;
Vicksburg *v.* Vicksburg Water Works Co., 206 U. S., 496, 508;
Wichita Railroad *v.* Public Utility Commission, 260 U. S., 48, 58-9;
Village of Saratoga Springs *v.* Saratoga Gas Co., 191 N. Y., 123, 143.

II. When regulatory powers have been conferred upon a commission, the acts of the commission in exercising them

have precisely the same effect as the acts of the legislature itself.

Vicksburg *v.* Vicksburg Water Works Co., 206 U. S., 496;
Live Oak Association *v.* Railroad Commission, 269 U. S., 354, 356.

In the Vicksburgh case, the City, under legislative authority, had entered into a contract with the Water Works Company, fixing a maximum rate for a term of years. In the course of the opinion, to which there was no dissent, Mr. Justice Day said (p. 515):

> "In the absence of a showing of unreasonableness 'so gross', as the Court of Mississippi has said, 'as to strongly suggest fraud or corruption', this action of the council is binding and in the time limited puts the right beyond legislative or municipal alteration to the prejudice of the other contracting party."

III. The State is forever prescribing rules of conduct for its citizens; and it should be particularly careful not to disregard the ethical standards which it has itself set up. The law does not favor one set of morals for the individual and another for officialdom.

Woodruff *v.* Trapnell, 10 How., 190;
State of Indiana *v.* Milk, 11 Fed., 389;
United States *v.* Willamette, etc., Co., 54 Fed., 807, 811;
Pearsall *v.* Great Northern Ry., 161 U. S., 646, 662-3.

In Woodruff *v.* Trapnell (*supra*), this Court said (p. 207):

> "We naturally look to the action of the sovereign state to be characterized by a more scrupulous regard to justice and a higher morality than belong to the ordinary transactions of individuals."

In Indiana *v.* Milk (*supra*), Judge Gresham, afterwards Secretary of State, said (p. 397):

> "Resolute good faith should characterize the conduct of states in their dealings with individuals; *and there is no reason in morals or law that will exempt them from the doctrine of estoppel.*"

That the State may be estopped by its authorized agents is now well recognized.

Whitehall, etc., Co. *v.* Atlantic, etc., Co., 160 App. Div., 208, 211;
United States *v.* Stinson, 125 Fed., 907, 910; aff'd. 197 U. S., 200;
Iowa *v.* Creighton (C. C. A.), 191 Fed., 270;
Bayne *v.* United States (C. C. A.), 195 Fed., 236.

IV. The application of the principle of estoppel to the facts in the present case is self-evident.

The Commission having made orders, which were accepted by the Company and performed at a large expenditure of time and money, the Legislature forthwith, during "the period of repose" specified in the orders, passed an arbitrary statute nullifying its previous action (that directed by the Commission) and requiring performance of entirely different and very burdensome acts, which it was physically impossible to perform at once and which could not be performed at all without jeopardizing life and property; and, even then, only at very great additional expense largely exceeding the expenditure of $196,000 previously made (Master's Report, par. 114, R. 209-10; not excepted to).

Was there ever a more scandalous and contemptuous disregard of even the most ordinary and commonplace decencies that should exist among those having dealings with each other? Can the Legislature trifle thus with vast property rights, resulting in great injury to thousands of innocent individuals, as well as to the companies directly affected?

If, in the early part of 1923, the Legislature could nullify

what it had done through its authorized Commission in October, 1922, why could it not make further radical changes, at frequent intervals, in the quality or price of gas to be supplied, delaying action only long enough in each case to enable the companies to comply, at great expense, with the proposed requirements?

There cannot be proper and valid regulation unless a reasonable period of repose is given the utilities to comply with the regulatory requirements. The rate must be reasonable; and it would not be reasonable unless it was to continue in force for a reasonable period. As Judge Winslow said, in the Queens Gas case (1 Fed. (2d), 351, 375):

> "This view has been generally accepted throughout the history of commission regulation, to the end that for a limited time the rate so fixed may not be disturbed over the objection, on the one hand of the company, or, on the other hand, of any party to the proceeding which resulted in the order";

and he referred to the decision of the Court of Appeals in the Saratoga case, which, in turn (191 N. Y., 123, 149), cited the opinion of Chief Justice Holmes, in Matter of Janvrin (174 Mass., 514).

Regulation becomes arbitrary, unreasonable and oppressive where it is unstable and capricious; and such a mockery of regulation as that afforded by this statute is also unreasonable, in the constant interference with the appliances of consumers and in the menace to life and property resulting from frequent changes in the composition of a gas containing poisonous and explosive constituents.

FIFTH.

Compliance with the Act impossible, dangerous and criminal.

I. The Act became effective on the instant that it was approved by the Governor, thus differing from previous legislation on the subject, where it was expressly provided that the statute should not become effective until after a specified interval (L. 1890, Ch. 566; L. 1906, Ch. 125; L. 1907, Ch. 410, Sec. 89; Appendix, pp. 45-7).

On June 2, 1923, when the Act was signed by the Governor, the gas companies in New York City were operating under a different standard, which had been deliberately established by the Commission, and were supplying gas of a different quality from that prescribed by the statute. It was beyond all human power to supply gas of a substantially different quality, forthwith. Nothing but magic could accomplish such an instantaneous result. *That it was actually impossible is conceded by the appellant, who has not excepted to the Master's Finding 11¼* (R. 210) of that fact.

II. The Act requires gas to be supplied to every consumer, of an unvarying content of not less than 650 heat units. The defendant's own and only expert on the subject, Mr. Little, testified, "without hesitation," that it was physically impossible to deliver to every consumer gas of that quality, even if a reasonable time had been allowed to readjust the numerous appliances (R. 1884).

The folly, wastefulness, costly interference with the legitimate business of the gas companies, the disadvantages to consumers in the greater cost and less efficiency, and the menace to life and property which would have resulted from an attempted compliance with the Act, are set forth with scornful emphasis by this *witness of the appellant*, who displayed much more warmth in his denunciation of the

statute than did the witnesses called by the plaintiff (R. 1883-5). No wonder the appellant did not except to the Master's Finding 114!

Mr. Little also testified that the coal gas plants of the companies (representing about 15% of the total manufacturing capacity; R. 1078) could not be operated at all under the 650 B. T. U. minimum requirement (R. 1884).

III. The statute also imposed an impossibility on the companies, in requiring them to furnish the 650 heat units, "measured under *normal* conditions of temperature and atmospheric pressure."

That is meaningless jargon and woeful ignorance of the air we breathe. There is, of course, no such thing as "normal" conditions of temperature and atmospheric pressure. "The wind bloweth where it listeth". The thermometer and barometer have not yet been adjusted to "normalcy", and never will be. A meteorological stop-watch has yet to be invented. The Master found that this test was an impossibility (R. 212); and his finding was approved by the Court (R. 323). It did not need the uncontradicted testimony of Mr. Woods, the Chief Engineer of the Consolidated system, to demonstrate such an obvious fact (R. 1119-21).

IV. The most indefensible feature of this remarkable legislation is its requirement of an instantaneous change in the quality of gas to be supplied.

To supply gas of a high thermal or illuminating quality, it must be enriched by hydrocarbons (chemical illuminants) obtained from gas oil. These constituents condense in the transmission of the gas, owing to the pressure necessarily employed and to changes in temperature; and having a high carbon content, the domestic appliances more readily become carbonized, with a resulting loss of efficiency in the gas. Where, on the contrary, the gas has a lower hydrocarbon content, such as that ordered by the Commission, the

supply is unobstructed and uniform, attaining its greatest efficiency for heating purposes and producing the most economic and satisfactory results (R. 1130-2).

Any change in the quality of the gas necessitates a corresponding change in the appliance used, so that the air or oxygen admitted may bear the proper proportion to the hydrocarbon content. If the necessary adjustment of the appliances is not made, where there is a change to a richer gas, the consequences are hazardous to life and property, resulting in asphyxiation and explosions, due to imperfect combustion; the former caused by the escape of the deadly carbon monoxide, and the latter by the highly explosive character of gas, where the proper adjustments in the appliances have not been made.

The entire subject is discussed temperately and convincingly by Mr. George E. Woods, the Chief Engineer of the Consolidated Gas System; and his testimony, which was simple, clear and easily comprehensible, notwithstanding its scientific character, was not contradicted; and it constitutes a comprehensive, interesting and admirable demonstration of the utterly impracticable character of this impossible legislation (R. 1113-47).

In the present case, all these considerations are magnified to a superlative degree. The Commission had changed the standard from 22 candle power, or about 630 heat units (R. 1205), to a minimum of 537 heat units; and the companies had adjusted their appliances accordingly, this work requiring a period of about six months (R. 1137; Master's Report, par. 31, R. 167, not excepted to). When, therefore, the Legislature required an instantaneous change to a richer quality of gas, it, in effect, commanded the companies to commit a crime; it directed an act which would have had appalling consequences throughout the entire City of New York. Much is said in these days about implicit obedience to whatever laws the legislatures may impose upon us; but would anyone say that the officers of these gas companies would have

been justified in complying with this statute, when they knew what destruction of life and property would inevitably result?

V. It cannot be successfully argued that the Legislature must have intended to give the Companies ample time to readjust the appliances. The language of the statute is too explicit for that:

"This Act shall take effect immediately."

SIXTH.

Unreasonable character of Act and impossibility of performance render it invalid.

I. In the exercise of the police power, the Legislature cannot require the performance of acts which are arbitrary, unreasonable and oppressive and have no relation to the protection of the public.

South Covington Railway *v.* Covington, 235 U. S., 537, 548-9;

Burns Baking Company *v.* Bryan, 264 U. S., 504, 515-16.

1. In the Covington case, this Court held that a provision forbidding the Railroad Company to permit a temperature in their cars below 50 degrees Fahrenheit was unreasonable, because of its impracticable character, and could not be sustained.

2. In Burns Baking Company *v.* Bryan, the Court held that a statute fixing maximum weights for bread, to comply with which would require the use of undesirable ingredients, resulting in an unfit product, was unreasonable and void.

3. In the Kings County Lighting case (7 Fed. (2nd), 192), the Statutory Court (Manton, *C. J.*, Campbell and Inch, *D. JJ.*,) held that the requirement of an immediate change in the standard required by the Act of 1923, rendered it void.

Kings County Lighting Co. *v.* Prendergast, 7 Fed. (2d), 192, 218.

II. A statute that directs the performance of an act that it is reasonably impossible to perform is void. This was recognized by this Court in the original Eighty-cent case, where the Act of 1906 contained the following provision:

> "The pressure of illuminating gas in any service mains in the said city, at any distance from the place of manufacture, shall not be less than one inch nor more than two and one-half inches."

The evidence showed that, to comply with this provision, without strengthening the mains and service pipes, would have resulted in risk of explosion and consequent disaster, and that, while it was physically possible to comply with the statutory requirement, it was commercially impracticable; and the provision was held to be void, although it was also held to be severable in that instance (212 U. S., 19, 21 "Ninth", 53). In other words, a legislature has no power to enact laws that are impossible of performance. Much less has it power to enact laws requiring the performance of acts destructive of life and property.

III. The Master expressly found (par. 114, R. 210) that immediate compliance with this statute was impossible and that the Act was "an unlawful and unconstitutional exercise of legislative power". *To this finding, no exception was taken by the appellant.*

SEVENTH.

Provision as to the quality of gas not severable.

The District Court held that the provision requiring the companies to furnish gas of a specific quality was an essential part of the Act (R. 320-1). In this it was undoubtedly right.

I. The Legislature clearly intended not only to reduce the price charged, but also virtually to restore the old standard which the Commission had superseded. The two provisions are in a single paragraph and, indeed, in a single sentence; and there is no more reason for disregarding the kind of gas to be supplied than there is for disregarding the rate prescribed.

Obviously, the Legislature did not intend to permit the companies to supply gas for $1, possessing only the thermal content prescribed by the Commission, or, for that matter, any less or other thermal content that the companies might see fit to supply; and it certainly did not intend to permit the various gas companies in the city to supply gas of varying and different qualities, with the result that there would be no recognized standard and that the consumers would never know what they were paying for, and the public authorities would have no standard for determining whether the charge made by the companies was reasonable. It was not any kind of gas, but gas of a particular kind, that the companies were obliged to furnish for a dollar.

Butts *v.* Merchants Transportation Co., 230 U. S., 126, 138.

II. From the very beginning of rate regulation in New York, the quality of gas to be supplied has been specified. Thus, in the Act of 1890 (L. 1890, Ch. 566, Sec. 70; Appendix, p. 45), the gas to be supplied was required to be of 20 candle power, tested in a definite, practical manner. This

provision was repeated (with an increase to 22 candle power) in the Act of 1897 (L. 1897, Ch. 385; Appendix, p. 45); it was made part of the Special Act for the City of New York in 1905 (L. 1905, Ch. 736); and it was repeated in the Eighty-cent Act of 1906 (L. 1906, Ch. 125, Appendix, p. 46). It would doubtless be difficult if not impossible to find a statute regulating the price of manufactured gas, in any State or country, which did not prescribe the quality of the gas.

III. In the original Eighty-cent case, in which the Public Service Commission, the Attorney General and the City of New York were parties defendant and appellant, no one thought of the possibility of suggesting that the Company could furnish gas of a quality different from that specified in the statute; and the arguments of all parties, as well as the decision of this Court, were predicated upon the fact that the Company was obliged to furnish gas of the quality specified in the statute. In the course of its opinion, this Court, while recognizing that the pressure provision was separable and that "the remainder of the statute would have been enacted even with that provision omitted", said (212 U. S., 19, 53):

> "The obligation would remain upon the Company, to have a pressure sufficient to insure a light of 22 candle power, as provided in the acts."

IV. That the specified quality is an essential part of the Act was insisted on by the Attorney General in his brief in this Court on the previous appeal (258 U. S., 165, 168); and it was taken for granted by this Court, in holding that the Company had done its best, under war conditions, to furnish gas of the prescribed character, and could not be held to an exact performance of the statutory requirement (258 U. S., 175-6).

V. In the Queens Gas case, to which the Attorney General was a party, the District Court held that this provision

of the statute could not be severed from the remainder of the statute fixing the price and rendered the statute void (N. Y. & Queens Gas Co. *v.* Prendergast, 1 Fed. (2d), 351). As heretofore stated (*ante*, p. 7), the Attorney General took an appeal from the decree in that case to this Court; but, on motion, the appeal was dismissed (268 U. S., 708). The Queens Gas Company is a subsidiary of the Consolidated Company (R. 74-5); and the decision in that case was in the nature of a decision *in rem* on the inherent invalidity of this statute.

EIGHTH.

Denial of the equal protection of the law.

I. The Act of 1923 left the consumers free to apply to the Commission for a further reduction in the rate, but prevented the companies from applying for an increase in the rate. The New York Court of Appeals has held that a statute containing such a provision is invalid, in denying the companies the equal protection of the law.

> Village of Saratoga Springs *v.* Saratoga Gas Co., 191 N. Y., 123, 149-50.

The opinion in that case was written by the late Chief Judge Cullen, a very able and eminent jurist and a profound student of constitutional law; and it was concurred in by the entire Court. In 1905, the Legislature passed a Gas Commission Act (L. 1905, Ch. 737), which permitted the Commission to establish rates for a period of three years, and to continue in force thereafter unless changed *upon the complaint of consumers*. Thus, the consumers were at liberty to apply for a reduction in the rate; but no similar right was given to the gas companies, to apply for an increase in the rate. This, the Court of Appeals held was an unjust discrimination against the companies, denying them the equal protection of the law and rendering the entire Act void.

That decision was a construction of a New York statute,

which is binding upon this Court. The provision in the 1923 Act is identical in its effect upon the companies and is decisive of the case at bar; because, it denies to them any opportunity to apply to the Commission for an increase in the rate, while leaving the consumers at liberty to make application, at any time, for a reduction in the rate.

II. It cannot be successfully contended that the Act of 1923 left the companies free to apply to the Commission for a change in the standard, which might result indirectly in a reduction in the price of gas. As we have heretofore shown, the quality of gas to be supplied is an integral part of the price charged, and the Commission is forbidden to increase the price at the instance of the companies, as they would be doing if they permitted the companies to reduce and consequently cheapen the quality of the gas. Moreover, even if the calorific content of the gas were to be reduced, the companies would still be left powerless to complain, if, notwithstanding such reduction, conditions should still render the dollar rate confiscatory.

III. There is no limitation upon the power of the Public Service Commission to establish rates, except that imposed by this statute of 1923 over gas companies in the City of New York. All gas and other utility companies throughout the rest of the State are left free to appeal, at any time, to the Commission for its approval of a change in their rate schedules; and this freedom is also enjoyed by all electric and other utilities in the City of New York, with the solitary exception of the gas companies; they alone are deprived of this right. In principle, the effect is the same as if a single gas company in the City were deprived of the right, while all other gas companies in the same place were given the right.

Evidently, this discrimination against the New York City gas companies was for the deliberate purpose of forcing them to acquiesce in the statute, by denying them the right to complain to the Commission and thus compel them to appeal to the courts for relief.

IV. By virtue of its power to promote "uniformity and consistency" in the regulation of gas companies (*ante*, p. 19), the Commission, shortly after its order of August 30, 1922, changing the standard in New York City, entered orders establishing the same standard throughout the State (R. 2203). That standard for the rest of the State remains unchanged. Only in New York City has the Legislature imposed a different standard. No justification for this discrimination can be given, unless it is justification for the Legislature to express its contempt for the Commission of its own creation, in an effort to catch the votes of the ignorant.

NINTH.

Excessive penalties render the Act void.

This statute was an amendment of the Public Service Commission Law. The most drastic penalties are imposed for any violation of that Law.

1. Section 58, subdivision 1, imposes a penalty of $1,000 for every violation of the law; that is, every time a gas company sends out a bill, in excess of the statutory price, it violates the law.

2. Section 58, subdivision 2, makes it a misdemeanor for any officer or agent of a gas company to violate "any provision" of the Law.

3. Section 75 allows every consumer to plead, as a *complete* defense to an action against him for the price of gas supplied, the fact that the charge is excessive.

If a company charged $1 for gas of only 537 heat units, when it was required to furnish a richer and more expensive gas at that price, it would obviously be making an excessive charge, within the meaning of this provision.

The foregoing penalty provisions were before this Court in the original Eighty-cent case and were held to be excessive

and unreasonable by the Court, as well as by the lower courts, rendering the Act invalid, for the reason that it acted as a deterrent, denying the companies affected access to the courts for protection.

Consolidated Gas Co. *v.* Mayer, 146 Fed. 150, 152-5;
Consolidated Gas Co. *v.* City of New York, 157 Fed., 849, 881;
Willcox *v.* Consolidated Gas Co., 212 U. S., 19, 53.

The principle has frequently been recognized and applied by this Court.

Cotting *v.* Kansas City Stockyards, 183 U. S., 79, 101;
Ex parte Young, 209 U. S., 123;
Wadley Southern Ry. *v.* Georgia, 235 U. S., 651, 662-4.

This Court, however, held that these provisions in the Act of 1906 were severable and that the Legislature would have passed the Act without them.

Willcox *v.* Consolidated Gas Co. (*supra*).

The question as to these penalty provisions, therefore, is, are they or any of them of such a character as to deter the officers and directors of the company from appealing to the courts for protection; and, if so, are the provisions severable? The former question must be answered in the affirmative and the latter in the negative.

I. As to the penalties of $1,000 for each offense, Section 24 of the Public Service Commission Law contains the following provision:

> "If the defendant in such action shall prove that during any portion of the time for which it is sought to recover penalties or forfeitures for a violation of *an order of the commission,* the defendant was actually and in good faith prosecuting a suit, action or proceeding in the courts to set aside *such order,* the court shall remit the penalties or forfeitures incurred during the pendency of such suit, action or proceeding."

It will be observed that this language does not permit the remission of penalties for the violation of "any provision of the law," as distinguished from an order of the Commission.

In the present case, the Legislature has left no loophole of escape from the excessive penalties. It has deliberately made the distinction, in the Public Service Commission Law, between an order of the Commission and a provision of the statute. Where the statute imposes penalties for the violation of an *order* of the Commission and where a right to review the order is given by the statute, the deterrent effect is removed, because in such cases the Legislature evidently did not intend to impose penalties while granting the right of review.

Chesapeake and Ohio Railway Co. *v.* Conley, 230 U. S., 513;

Wadley Southern Railway *v.* Georgia, 235 U. S., 651;

Oklahoma Operating Co. *v.* Love, 252 U. S., 331.

In all three of the cases cited, the act complained of was an *order* of the Commission, which was made reviewable by the state court; and in the Chesapeake and Ohio and the Wadley Southern cases, this Court was adopting the construction placed on the statute by the state courts.

II. The officers and agents of the companies are criminals if they violate the Law; and, in addition, they expose their companies to the loss of all the charges for gas supplied during the pendency of the litigation; because, if the statute should be held to be valid, the consumers are relieved completely of all liability for gas supplied during the pendency of the litigation. The present suit was commenced in June, 1923, more than three years ago. The gross operating revenues of the Company for 1923 alone amounted to more than $25,000,000 (R. 2334). No permission of the Court to disregard the statute, *pendente lite,* would deprive the con-

sumers of this complete defense, if the statute should be sustained.

Is there any doubt that these provisions would deter any board of directors from questioning the validity of the statute, if failure to sustain their contention should expose them personally to fine and imprisonment and the company to loss of all operating income during the litigation? That risk had to be faced when the present suit was commenced; and nothing but supreme confidence in the outcome would have justified it.

TENTH.

Penalty provisions not severable.

I. In the original Eighty-cent case, this Court held that the penalty provisions, which were a part of the Act itself, were severable, because it thought that the Legislature would have passed the Act even if the penalty provisions had been omitted (212 U. S., 19, 53).

II. No such conclusion can be reached in the present instance. If the Legislature had passed an independent Act, containing penalty provisions, as was done in the 1906 Act, the previous decision of this Court might, perhaps, be controlling. But it did not pass an independent Act. It merely amended the Public Service Commission Law, by adding another Section to it (Sec. 67*a*). It, therefore, clearly intended to have the law enforced by the aid of these penalties. It cannot be said that the Legislature would have passed the statute even if the Public Service Commission Law had not contained these ruinous penalties; because, it expressly made the Act a part of the general law that contained the penalty provisions; and it consequently legislated deliberately, with the intention of having those penalties made ap-

plicable to a violation of the statute. These provisions were contained in the original Public Service Commission Law of 1907 (L. 1907, Ch. 429, Secs. 58, 73, 75) and were substantially a repetition of the provisions contained in the Act of 1906 and the Gas Commission Law of 1905 (L. 1905, Ch. 737), showing that the provisions in that Act had not been lightly considered, but were intended to be an integral part thereof. These heavy penalties were not only contained in the original Act of 1907; but they have been retained ever since, thus conclusively establishing the settled legislative intent.

ELEVENTH.

The Attorney General cannot question findings relating to rates and standards of gas.

I. The Public Service Commission has not appealed.

The Act creating the Commission was passed in 1907 (L. 1907, Ch. 429); and, as amended (complete copies submitted for the convenience of the Court), it confers upon the Commission very broad powers of regulation, including the complete control of rates and standards (see, particularly, Sections 64-72).

Sections 57, 74 and 103 require the Commission to see to it that the laws affecting public utilities, as well as all orders made by the Commission, shall be enforced; and the Commission is furnished with a counsel and a complete legal department (Sections 6 and 13). The powers conferred upon the counsel are so comprehensive that, in the recent telephone litigation, he was made a party defendant (New York City *v.* N. Y. Tel. Co., 261 U. S., 312, 315).

This Court has expressly held that the Commission is the necessary party in a suit where the question of a rate is involved.

In re Engelhard, 231 U. S., 646;
N. Y. City *v.* N. Y. Telephone Co., 261 U. S., 312, 315;
Smith *v.* Illinois Bell Telephone Co., U. S., ; 46 Sup. Ct. Rep., 408 (April 12, 1926).

In the Engelhard case, the Court, in a unanimous opinion written by Mr. Justice McKenna, said:

> "It is the universal practice, sustained by authority, that the only mode of judicial relief against unreasonable rates is by suit against the governmental authority which established them or is charged with the duty of enforcing them."

This language was quoted with approval by Mr. Chief Justice Taft, in his opinion in the New York Telephone case (*supra*); and the principle has again been recognized in the recent Illinois Bell Telephone case (*supra*).

II. It is thus quite evident that the Attorney General is not a necessary party in a rate case, unless he has been made so by express legislation; for it will not be presumed that the Legislature intended to subject public utilities to a dual control in the matter of rates, after having set up such elaborate machinery for their regulation and having required the Commission to see to the enforcement of all laws and regulations affecting rates; a subject to which the Commission is required to devote its time and attention, while the Attorney General, an officer elected every two years, is required to devote his energies to the protection of the general interests of the State.

Executive Law, Sec. 62.

III. The Attorney General was made a party defendant in the present case by virtue of Section 68 of the Executive Law (L. 1913, Ch. 442):

"Sec. 68. *Attorney-general to appear in cases involving the constitutionality of an act of the legislature.*

Whenever the constitutionality of a statute is brought into question upon the trial or hearing of any action or proceeding, civil or criminal, in any court of record of original or appellate jurisdiction, the court or justice before whom such action or proceeding is pending, may make an order, directing the party desiring to raise such question, to serve notice thereof on the attorney-general and that the attorney-general be permitted to appear at any such trial or hearing in support of the constitutionality of such statute. The court or justice before whom any such action or proceeding is pending may also make such order upon the application of any party thereto, and the court shall make such order in any such action or proceeding upon motion of the attorney-general. When such order has been made in

> any manner herein mentioned, it shall be the duty of the attorney-general to appear in such action or proceeding in support of the constitutionality of such statute."

Standing alone, this provision might be held to be broad enough to apply to a rate statute attacked by a utility as unconstitutional. But with the comprehensive scheme of commission regulation in force, no such meaning should be given to it. The machinery of rate regulation and its enforcement is in all respects complete in the general regulatory law. It requires no supplement. Even where a statute is assailed as unconstitutional on account of some inherent defect, Section 68 does not make it compulsory on the Attorney General to appear and defend it. It is not necessary, in the first instance, to make him a party in an action or proceeding where the validity of a law is questioned; and upon receiving notice of the pendency of such an action or proceeding, he may decline to make a motion for leave to appear in the action. What the Legislature evidently had in mind in enacting what is now Section 68 of the Executive Law, was a direct attack upon a statute on the ground that it was inherently defective and, consequently, of no legal force whatever; whereas, a rate statute may be entirely valid when passed but subsequently become obnoxious to the Constitution by changes in economic conditions.

> Banton *v.* Belt Line Ry., 268 U. S., 413, 418.
> Municipal Gas Co. *v.* Pub. Svce. Com., 225 N. Y., 89, 96.

Such was the familiar Eighty-cent Act of 1906, on the verge of invalidity when first brought to the attention of this Court in 1908 (212 U. S., 19), and, later, pronounced invalid under post-war conditions (258 U. S., 165).

In the case at bar, the Attorney General has, of course, the right to repel the direct attack made upon the validity of the Act in the preceding points of this brief; but beyond that, he cannot go.

IV. Where there is a Public Service Commission, there is no more reason why the Attorney General should concern himself with a rate case, where the rate is fixed by the Legislature, than where it is fixed by an order of the Commission. An order is the act of the Legislature, by its duly authorized agent, and has precisely the same effect as a statutory enactment, as this Court has repeatedly held.

Atlantic Coast Line *v.* Goldsboro, 232 U. S., 548, 555;

Arkadelphia Co. *v.* St. Louis, S. W. R. Co., 249 U. S., 134, 141;

Lake Erie & Western R. Co. *v.* State Pub. Utilities Comm., 249 U. S., 422, 424;

Live Oak Association *v.* Railroad Commission, 269 U. S., 354, 356.

But no one would think of making the Attorney General a party defendant in an action or proceeding under Section 74 of the Commission Act, to compel a utility to respect an order of the Commission affecting rates, or requiring extensions of mains, enlargement of plant, or other affirmative action.

In a case of that kind, if the Legislature desired the Attorney General to appear specially in the interests of the people of the State at large, it would pass a special statute conferring express power upon him to do so, as in the Telephone case (261 U. S., 312, 315), where the rates concerned the entire State of New York. But even in that case of express power conferred upon the Attorney General to appear in the pending proceeding, this Court still regarded the Commission as the necessary party.

TWELFTH.

The findings of fact should be accepted as conclusive.

I. This Court will not review findings, where no exceptions have been filed.

> Medsker *v.* Bonebrake, 108 U. S., 66, 72;
> Kimberly *v.* Arms, 129 U. S., 512, 524.

II. It will not overrule findings of fact made by a special master and approved by the trial court, where there is any evidence to support them and where they are not in conflict with some principle of law.

> Kimberly *v.* Arms, 129 U. S., 512, 525;
> Davis *v.* Schwartz, 155 U. S., 631, 637;
> Adamson *v.* Gilliland, 242 U. S., 350, 353;
> Denver *v.* Denver Union Water Co., 246 U. S., 178, 181-2.

The principle is one peculiarly applicable to rate cases, which now make such heavy demand upon the time of the Court.

Where, as in the present case, the findings have been acquiesced in by a public body charged with the duty of ascertaining and determining the facts, and presumably having knowledge of them, they should be accepted here as conclusive.

As heretofore stated (*ante*, p. 18), the New York Court of Appeals has recognized the peculiar fitness of such a trained body to pass upon complicated questions of fact, with which their duties and experience have made them familiar.

The Public Service Commission of New York has had nearly twenty years within which to become familiar with

the conditions affecting the operation of gas companies in the City of New York. The books of account of the companies are kept in accordance with its regulations and are always open to its accountants (Sec. 66, subds. 4, 9). Their properties are at all times subject to the inspection of the Commission's engineers (*id.*, subd. 8); and the Commission is kept fully informed of all the properties and activities of the companies by a detailed annual report which the companies are required to make (*id.*, subd. 6). Why should the Attorney General, or anyone representing him, call in question what this Court has termed the "informed judgment" (258 U. S., 165, 174) of the Commission, in regard to the facts found by the Court below?

THIRTEENTH.

Stare decisis.

The appeals in the Queens Gas case and in the Bronx Gas and Electric case, taken by the Attorney General but not prosecuted by him (the one in the Queens case having been dismissed, as heretofore stated, *ante*, p. 7), should preclude the Attorney General from now questioning the principles recognized in those cases and upon which they were decided.

As previously pointed out (*ante*, pp. 2-3, 7), Judge Winslow held in those cases that the Act was invalid, not merely because of the confiscatory effect of the rate on the particular companies which were parties to the suit, but for the general reasons mentioned in this brief, which are applicable to all companies affected by the Act.

The courts will not permit the repeated litigation of the same legal questions every time a different company complaining of a statute brings a suit to have it declared void. The principles definitely established in one such suit should be applied in subsequent suits of a similar nature.

On the previous appeal by the Consolidated Gas Company to this Court by the Attorney General, it was held that the books of the Company, presumably correct from having been kept under the supervision of the Commission, were admissible as *prima facie* evidence of their contents (258 U. S. 165, 176). The principle thus enunciated would, of course, be applied in suits brought by other companies.

FOURTEENTH.

The Act of 1923 should be declared void, without regard to its confiscatory character, and the decree of the District Court should be affirmed.

Washington, October 15, 1926.

SHEARMAN & STERLING,
Solicitors for Appellee.

JOHN A. GARVER,
Of counsel.

APPENDIX.

Laws 1890, Ch. 566, Sec. 70.

Enacted June 7, 1890; effective May 1, 1891.

§70. Price of gas.—In any city in this state having a population of eight hundred thousand or over, no corporation or person shall charge for illuminating gas a sum to exceed one dollar and twenty-five cents per thousand feet, and such gas shall have an illuminating power of not less than twenty sperm candles, of six to the pound, and burning at the rate of one hundred and twenty grains of spermaceti per hour, tested at a distance of not less than one mile from the place of manufacture, by a burner consuming five cubic feet of gas per hour, and shall comply with the standard of purity now or hereafter established by law; but in any district or ward of any city containing over one million inhabitants, which district or ward is separated from the main portion thereof by a stream or other natural boundary, any gas-light corporation may charge a price not to exceed one dollar and sixty cents per thousand cubic feet, but such corporation shall not charge a greater price in the city where its main works shall be situated than in such district or ward.

Laws 1897, Ch. 385.

Section 1 limits the price in a city having a population of fifteen hundred thousand to one dollar and twenty cents during eighteen hundred and ninety-seven; one dollar and fifteen cents during eighteen hundred and ninety-eight; one dollar and ten cents during eighteen hundred and ninety-nine; one dollar and five cents during nineteen hundred, and one dollar thereafter.

Section 3, entitled "Change of territory not to affect Act", is as follows:

> Sec. 3. A change hereafter effected in the territory or boundaries of such a city, either by annexation, consolidation or otherwise, shall not be deemed to enlarge or change the territory within which the price of gas is regulated as herein provided, but this act shall continue

in force for the purpose of regulating the price of gas in such city, as now constituted, notwithstanding any subsequent change of territory, but shall not apply in or to territory not now in such city.

Section 4, entitled "Standard of illuminating power", is as follows:

"§ 4. The illuminating gas furnished by any such corporation, association, company, co-partnership or person shall have an illuminating power of not less than twenty-two sperm candles of six to the pound, burning at the rate of one hundred and twenty grains of spermaceti per hour tested, at a distance of not less than one mile from the place of manufacture, by a burner consuming five cubic feet of gas per hour, and shall, as regards purity, comply with the standard now or hereafter established by law."

Laws 1906, Ch. 125.

Enacted April 3, 1906; effective May 1, 1906.

Section 1. A corporation, association, copartnership or person engaged in the business of manufacturing, furnishing or selling illuminating gas in the city of New York, except in the fifth ward of the borough of Queens and in that portion of the borough of the Bronx formerly contained in the towns of Eastchester and Pelham, shall not charge or receive for gas manufactured, furnished or sold in said city a sum per one thousand cubic feet in excess of the following rates:

1. In the borough of Manhattan, in the first ward of the borough of Queens, in the borough of Brooklyn except the thirtieth and thirty-first wards thereof, and in the borough of the Bronx, except that portion of it formerly contained in the town of Westchester outside of the villages of Wakefield and Williamsbridge, eighty cents.

2. In the second and fourth wards of the borough of Queens, and in the thirtieth ward of the borough of Brooklyn, one dollar.

3. In the third ward of the borough of Queens, in the thirty-first ward of the borough of Brooklyn, and in the borough of Richmond, one dollar and twenty-five cents for the remainder of the year nineteen hundred

and six; one dollar and twenty cents during the year nineteen hundred and seven; one dollar and fifteen cents during the year nineteen hundred and eight; one dollar and ten cents during the year nineteen hundred and nine; one dollar and five cents during the year nineteen hundred and ten; and one dollar thereafter.

4. In that portion of the borough of the Bronx formerly contained in the town of Westchester, outside of the villages of Wakefield and Williamsbridge, one dollar and fifteen cents during the years nineteen hundred and six, nineteen hundred and seven and nineteen hundred and eight; one dollar and ten cents during the year nineteen hundred and nine; one dollar and five cents, during the year nineteen hundred and ten; and one dollar thereafter.

Section 2. The illuminating gas furnished by any such corporation, association, copartnership or person shall have an illuminating power of not less than twenty-two sperm candles of six to a pound, burning at the rate of one hundred and twenty grains of spermaceti per hour tested at a distance of not less than one mile from the distributing holder by a burner consuming five cubic feet of gas per hour and each one hundred cubic feet of gas shall not contain more than five grains of ammonia nor more than twenty grains of sulphur nor more than a trace of sulphuretted hydrogen. The pressure of illuminating gas in any service mains in the said city at any distance from the place of manufacture shall not be less than one inch, nor more than two and one-half inches.

Section 3. Any corporation, association, copartnership or person violating any provision of this act shall forfeit the sum of one thousand dollars for each offense to the people of the state.

Section 4. This act shall not apply to gas furnished or sold to the city of New York.

Section 5. Chapter three hundred and eighty-five of the laws of eighteen hundred and ninety-seven, entitled "An act to regulate the price of illuminating gas in cities of fifteen hundred thousand inhabitants," and all other acts or parts of acts inconsistent herewith are hereby repealed.

Section 6. This act shall take effect on the first day of May, nineteen hundred and six.

Office Supreme Court, U. S.
FILED
OCT. 28, 1905
WM. R. STANSBURY
Clerk

Supreme Court of the United States

OCTOBER TERM, 1905

No. 357

ALBERT OTTINGER, as Attorney-General of the State of New York,
Appellant (Defendant below),

vs.

CONSOLIDATED GAS COMPANY OF NEW YORK,
Appellee (Plaintiff below).

BRIEF AS TO CONFISCATION

Containing also the Appellee's Summaries of the Evidence and Appellee's Reply to the Appellant's Brief

Stat of Value 1 2b

BENEDICT & BENEDICT,
Solicitors for Appellee,
No. 55 Wall Street,
New York City.

WILLIAM D. GUTHRIE,
JAMES H. GUTHRIE,
Of Counsel.

[illegible] 27 Nassau Street, New York.

Evidence.

Consolidated case.

R.1365. et seq.

James E Allison, St.Louis, Consulting Engineer.

(After discussing value) The rate of return which a buyer of a utility property would expect to realize hasn't anything to do with the amount of capital. People want a certain rate for the money they put in.****discussing rate base*****The test of the required rate of return is that return which would induce new capital to create this enterprise, and perform this service, and your rate must be such on the reproduction cost as would lead new investors to come in. Unless that condition exists the present investor's capital is being in duress and being made to perform a service for the public at a lower rate than anyone else would do it for.

The market for public utility securities and the source of obtaining investment in public utility enterprises is very seldom a local market. The only financing that is done now locally is what is called customer sales- sales of securities to the customers. That has come into vogue recently, to a certain extent, but nearly all financing goes to the financing centers, either Chicago or New York, and sometimes St.Louis. The greater part of them come from New York, that is, the initial market for utilities securities nearly all public utilities are controlled here in New York through holding companies. **then circulated through the country**In that way I have acquired familiarity with the rate of return usually expected and required to induce investment in gas properties by investors in New York and vicinity; we must know what it would take within certain limits to induce investment in a certain utility. The rate of return usually expected and required to induce investment in gas properties by investors in New York City depends on the property. Each property has a peculiarity of its own that would influence the rate of return demanded by the investor or the investment banker for the investor. By conditions I mean risks and surrounding circumstances; different regulation, which is now a very potent factor in the value of utilities securities. I was speaking of utility securities in general; that the property itself would influence the rate of return demanded on its securities. I had in mind the rate of return demanded on its securities. That is a somewhat different figure from the reasonable rate of return-reasonable rate of return in a rate case. Public regulation of utilities is now probably the greatest factor of risk in the business. A utility can be kept on the verge of ruin or it can be made moderately prosperous in accordance with whether they have good regulation or not. If you have a condition under which protracted litigation produces expense and heopardizes credit, it is well known by everybody that

has anything to do with utilities. The regulation creates most of the risks of the business. Taking in all of the gas companies in this vicinity, as to the limits of the required rate of return, the smaller utilities would have to distribute , in order to get money, about 10 per cent,-~~and get money~~;- and they would have to ern more thanthat in order to get money at 10%. The larger uti ities, such as the Consolidated might get money, might distribute somewhat less- nine and an quarter- I mean eight and a quarter- it would have to earn more than eight and a quarter, in order to get money as eight and a quarter. It would have to distribute eight and a quarter, In other words, there would have to be a margin of safety there. It would have to earn perhaps between 9 and 10%.*****It would not be practicable or possible to interest investors in the acquisition of a public utility enterprise of that character in such a territory upon an expectation of earnings less than 8% upon the cost of buying or building the property at the present time.***Must be a margin of safety over.distribution.

R. 1387
A common stock issue in '23 returned about 9 1/4%.That is an indication of what they were willing to invest their money for, but that does not represent the return the company must have because people would not put their money in for 81/4% distributed unless they thought that the company was going to earn more than that.
R 1389
that rate of return to which it is entitled is between 81/2% and 10%. It must be 81/4% distributed and perhaps between 9 and 10% earned to get the money.

Hoyt of New York, R. 1393
The rate of return that a buyer of a utility property would expect to realize would have to be figured , upon the cost to but or upon the cost to build at the present time.

*****According to experience the rate of return usually expected and required to induce investment in gas properties by investors in New York and vicinity is at least 9%. With respect to the whole capital requirements I think it would be the minnimum.Rate of small ammonts it might get has no bearing on the rate of interst for which the utility may obtain at times all or part of its current requirement of capital for additions and extensions. ******R. 1397
Under circumstances here, "in my judgment it would not be possible to interest investors in the acquisition or establishment of a public utility enterprise of that character in such territory upon an expectation of earnings less than 8% upon the cost of buying or building such a property at the present time. Unless such a rate of return were earned and distributed, it would not continucusly be possible to attract capital or investment by the general public in N.Y. in order to provide extensions to the plant and property. The company might get a small amount, but it could not function over a period of years unless there was that earning power, or more at least.
R.1403 I think I stated that I thought the gas company should have at least 9% on its investment in distributing gas and making it, so far as it does make it. **on reproduction cost of the properties as of the present time.

B.134
Appellee's brief says"The defendant's called no witnesses to contradict the qualified witnesses of practical experience who testified in behalf of the appellee. No opinion was expressed that less than eight % was required"

Appellant's Brief Page 115 apparently acquieces. It confines itself to a criticism of the above quoted witnesses.

Graham, Master
The Master' Report 6F.(2d) 243 may be quoted on the subject as follows:

p 271 Present value, June 1,1923, $134,101,730,77

273 "The plaintiff is entitled to a fair and reasonable return upon the present value of its property used and useful in the service of its gas consumers. If the investors were going to buy or build a property like that of the complainant what amount would they feel that the property should earn in order to induce them to invest their money in the purchase or construction of such a property? Taking into consideration the other classes of investment in this locality, with the comparative risks and return thereon, the rate of return generally required to secure proper credit for borrowing money and financing its operations, what should a utility be permitted to earn, in order that it might compete successfully with other businesses and be on a parity with them?

***My understanding of rate of return is that it relates entirely to the return the corporation itself must earn over and above the cost of operation and taxes before it makes any distribution to its stockholders or bondholders. A corporation does not ordinarily expect to pay out all its earnings in the shape of dividends, and, if it is succesfully operated, certainly it would not be obliged to pay them out for interest on its obligations.**It is these earnings and not the amount disbursed to bond or stockholders, with which the courts are concerned in passing upon the confiscatory character of the rates. Just what this rate should be is not a fixed and establishes matter, applicable alike to all classes of investment and all sections. Business men discriminate between investment and rates of interest and return vary.

****Discusses witnesses**While of course there is no guaranty on the part of the public authorities or any one else that a public utility should be successful, yet if it could earn a proper return on the value of its property in the business without regulations or statutes preventing them from so doing, then such regulations or statutes operate to deprive the company without justification and are confiscatory.. The defendants claim that 6% return would be sufficient in this case to prevent the statute being obnoxious to the constitutional provision , because of Wilcox V Consolidated Co.---Master then points out change due to war, and thatthe more recent cases, and those decided under present conditions, have uniformly tended to a higher rate. Cites, Bluefield Case,

and others and concludes: "I find that 8% is a rate customarily required in the locality to be earned on the present value of the property of a regulated public utility, and that the plaintiff should be permitted to earn at least this amount."

Winslow D.J. page 280

"It is also the court's conclusion that at the present time a reasonalble rate of return according to well-recognized custom in a regulated business like this, is not less than 8%. The rate of return on the property is not to be confounded with the amount of dividends that a corporation might pay on its capital stock. Indeed, according to all successful business experience, a corporation paying out in dividends all or even the major part of its net earnings is courting speedy disaster. "The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. Bluefield Case,. For the reasons stated, it is unnecessary for the court to further analyze the elements considered in the several bases."

Ottinger v Brooklyn Union Gas Co.

Justifacation for finding of 8% rate of return.

1, EVIDENCE.

Vol 2, "ecord p 958

Jacob H Hollander, Professor Political Economy, Johns Hopkins,
R.963
To the effect that the equivelent of 6% in 1913 was in 1923 over 9%. Shows how calculation arrived at. No direct statement of what proper rate of return is.

R.989 Sidney Z Mitchell, President of Bond Co.

R 994 In my opinion the necessary percentage of return required to invite, to buy or build a public utility such as has been descfibed is at least 8% upon the cost to buy or build at the time the trade is made.
R1001
In order to get money for this concern, they must earn 8% on a fair valuation.*****All I want to know or all the investor wants to know is that he will get 8% on all the money that he invests, that the investors put in it. If they spend it for paving, they have to get 8% on it or they won't spend it, otherwise they may not get but 6 or 7.***That is what I had reference to when I made these answers that it would require 8% upon the value of the plant, if we were to build the plant from the ground up.***securities issued has nothing whatever to do with the value of the property for the purpose of my testimony.

Appellee's Brief p 115 says neither the commission nor the attorney general submitted any evidence.

Appellant's brief on this point refers to the brief on the Consolidated Case.

7 Fed.(2d.)628.
Master Latson's report p 630 at 654

Expert evidence was introduced by the plaintiff to the effect that a return of 8% is normal, in view of all the contingencies surrounding the conduct of a business of this character. This seems to be in accord with prevailing conditions of which the court will take judicial notice and seems also to be in harmony with current adjudications. The defendant offered no evidence to the contrary. cites Ohio case,1925. 267 U.S.359, in which rate of return of 5% was held inadequate and confiscatory.
Dr. Hollander called by the plaintiff as an expert witness testified that in his opinion prevailing commodity prices would remain substantially stapee for a number of years. In dosclosing the mental processes by which he arrived at bhis conclusion, the witness indicated that, as a learned and distinguished political economist, he had studiously addressed himself to the comprehension and ana-

ses of the problem, If this forecast of Prof. Hollander be correct, we must accept the present standards as substantially normal now, just as in the pre war days we accepted the standards then prevailing as normal then. I have nothing before me to indicate a contrary view.

Campbell D,J. at p. 672.

On the question of the rate of return to which the plaintiff is entitled, the only evidence given was that of the expert witnesses called by the plaintiff, who placed it at 8% which was approved by the master in his opinion.

The defendants, by way of argument only, because they called no witness, contend that the act cannot be held to be confiscatory if plaintiff receives a return of 6%.

Whatever force there might be to the argument of the defendants under some circumstances, it seems to be lost in the instant case, when you consider that bonds issued by this plaintiff while under the regulation of the defendant public service commission, and with its approval, bear interest at 7%, showing clearly that the lending public did not consider 6% as an adequate return.

Therefore, on the evidence in the instant case, and on consideration of the opinions of the courts in N.Y and Queens Gas case,1 Fed.2d.351; Bronx Co. v Prendergast 1 Fed.2d.377; N.Y.Tel.Co v Prendergst, 300 Fed. 822, Bluefield Case, and Consolidated Case, and I see no reason to disagree with the opinion of the master.

#365

Ottinger v King's County Co.

Evidence R. 525
Edward F.Hayes, Pres. Blair Co.

Take a corporation that we were going to furnish all the capital or market securities to cover the whole thing, the whole investment in it, I would say in a general way that a public utility of the type would espted to earn at least 8% upon the value of the property at the present time.****

I mean to say that it is necessary that it earn that in order to get capital, that is really the basis on which capital is attracted to any enterprise, really what the enter prise as a whole will earn, because although you might be able to conceivably float a bond issue for 6% of any given period of time, that would only suffice for one particular period,.******

It is my opinion that unless this company would show earnings over all on the value of its property of at least 8% it would not be at a disadvantage s far as the money market is concerned. ***

R 531 The figure of 8% which I gave in my testimony pertains to what would in my opinion have to be the rate at the present time or for the last two or three years. etc

7Fed. 2d. 192
Master Hoff's reprort

Rate of return at 194

The development of the plaintiff's territor and the consequent demands for new and additional service have required and will continue to require the company to raise and invest substantial amounts of new capital in enlargement and extensions of its facilities. The situation peculiarly, therefore, is one where an adequate return is essential to the company and to the public, Additional capital must be provided etc****

It appears to be settled that a utility is entitled to such rates as will afford a return sufficient to keep and attract capital, giving consideration to the risks of the business and to the return that capital through open competition can secure in other channels.**discusses cases, and testimony of Hayes, that defendant's called no witnesses, concludes that 8% is a fair and proper return to adopt in this case for the plaintiff.

Manton Circ.Judge. 218 CCA

Approves finding of the master that 8% was a reasonable rate of return and that one below would be too low, and confisc tory.

Banton v Belt Line 268 U.S. 413,

"A commission or other legislative body, in its discretion, may determine to be reasonable and just a rate that is substantially higher than one merely sufficient to justify a judicial finding in a confiscation case that it is high enough to yield a just and reasonable return on the value of the property used to perform the service covered by the rate. The mere fact that a rate is nonconfiscatoru does not indicate that it must be deemed to be just and reasonable. It is well known that rates substantially higher than the line between validity and unconstitutionality properly may be deemed to be just and reasonable, and not excessive or extortionate."

Classification of cases herein discussed according to year

1903-----6% approved (2cases)

1909-----6% " 1 case

1911-----5 5% " 1 case

1912---- 6% " 2 cases

1915---- 6% " 1 case

1919---- 6% too low 1 case

7% approved 1 case

1921---- 7% approved 1 case

1923--- 6% inadequate 1 case

5 1/3 " "

8% approved "

8 5/3 not too low, one case, (peculiar facts)

1924 6% too low one case

7% approved one case

1925

8% approved one case

7 1/3 too low, one case.

Appellee in his Brief Page 126 cites cases to show that 8% has been widely recognized as the customary rate, the denial of which constitutes confiscation.

Bluefield Case, 1923, 262 U.S. 679, in which case 6% was held inadequate to constitute just compensation.

Fort Smith v S.W.Bell Tel.Co. 294 Fed. 102, ~~in which 5 1/3% return on minimum value of property was held inadequate.~~ No holding as to fair rate in Circuit Ct.

Southwestern Bell Tel. Co. v Comm. 262 U.S.276 1923 In which case 5 1/3% on minimum value of property was held inadequate.

Lincoln Gas Co. v Lincoln 250 U.S. 256. 1919. In which case 6% was held too low, where the legal rate was 7% and the usual business rate 8%.

New York and Richmond Gas Co. v Prendergast 10 Fed.2d. 167, 1925 under the same statute as here involved, in which 8% was held reasonable.

New York and Queen's Gas Co. v Prendergast, 1 Fed.2d.351, 1923 under same act, in which 8% was held reasonable.

Pacific Gas and Electric Co. V SanFrancisco, 273 Fed.937, in 1919 in which a little less than 7% was held reasonable.

Alton Water Co. v Ill.Comm. 279 Fed.869. 1921, in which 7% was upheld.

Newton v Consolidated Co. 258 U.S.165,1922 Confirmed lower court in holding existing rates too low, but said that court should not fix a rate to guide in the future.

Indiana Bell Tel.Co. v P.S.Comm. 300 Fed.190,1924. 6% held too low.

Bronx Gas Co. v Prendergast. 1 Fed.2d. 377, 1924, in which case no rate was declared.

Other ~~cases here cited, are from State reports~~, and not here ~~available~~.

see next page

Michigan P.U.Comm. v Michigan State Tel.Co. 200 N.W. 749, 1924, "Complaint of the rate of return fixed by the commission at 7% is not pressed and will be passed." Only discussion of rate of return.

Adirondack Co. v P.S.Comm. 211 App.Div. 272, 1925. 7 1/3 inadequate, where company had in past been forced to operate at loss, by commission's order.

Matter of Peoples$ Gas Co. v P.S.Comm. 214 App.Div.108, 1925, No finding as to rate. Is based on erroneous rate base.

Pioneer Tel Co.v Westenhaver, 29 Okla. 429, 118 Pac.354, 1911, 5.5% less than the legal rate of interest held not unreasonable or oppresive.

McAlester Gas Co. v Corp. Comm. 227 Pac. 93. 1924, No specific finding.

Bronx Co. v P.S.Comm. 1924.

Columbus Gas Co. v P.S.Comm. 140 N.E. 538, 1923 Under relevent facts present. 6 5% held not too low.

Appellant in his Brief P 63 in the King's County Case, cites U.S. Supreme Court cases, "holding a rate will not be declared confiscatory if it allows a return of less than 8%." Dates and rates upheld are :

San Diego Land Co. v Jasper, 189 U.S. 439 1903. Water rate case 6% held not confiscatory.

Stanislaus County v San Joaquin 192 U.S 201, 1903. 6% held to be uniform return, and satisfactory.

Wilcox v. Consolidated Gas. Co. 212 U.S.19, 1909, 6% approved on ground it was amount ordinarily expected as return on an investment.

Cedar Rapids Gas Co. Cedar Rapids, 223 U.S. 655, 1912, 6% approved. Iowas Gas Co.

City of Louisville v Cumberland Tel Co. 225 U.S. 430, 1912 "Expresses no opinion as to whether cut to 6% would or would not be confiscatory".

Des Moines Gas Co. v Des Moines, 238 U.S. 153, 1915, 6% allowed, but says, " especially true in view of the fact that the ordinance was attacked before there was opportunity to test its results by actual experience.

Darnell v Edwards 564, 1917, Railroad Case. No rate found. But holding based on rule that rates may be unprofitable during test period.

BRIEF AS TO CONFISCATION

PAGE

I. Trend of wages and prices since 1922 decision of this Court (258 U. S. 165); present and prior findings of appellee's costs and properties compared 47-60

II. Statute clearly confiscatory 60-71

III. Appellant's present "estimate" of operating costs 72-98

IV. Additional cost of 650 B.t.u. gas 99-100

V. Conservative bases of Master's findings as to amount and value of property 100-118

VI. Appellant's $84,000,000 "rate base" less than the adjudicated original cost 118-122

VII. Appellant's claim that return of less than six per cent. upon less than original cost is sufficient 123-138

REPLY TO APPELLANT'S BRIEF

VIII. Appellant's attacks on the Court and Master 138-146

IX. Rates charged by appellee since 1920 147-152

X. Appellant's claims as to rates charged for gas in other cities 152-157

XI. Price paid by appellee, with Commission approval, for New York Mutual property in 1922 157-163

XII. Manhattan plant-sites not "too expensive" land 164-170

XIII. 14th and 42nd Street plants (retired late in 1923) 170-178

PAGE

XIV. Judge Hand's decision in appellee's prior suit (267 Fed. 231) 178-190

XV. Transfer-of-gas system and interconnection of mains 190-211

XVI. Inter-company charges and their apportionment 211-215

XVII. Value of mains and services 216-231

XVIII. Value of land 232-233

XIX. Working capital 234-252

XX. Undistributed structural costs 253-263

XXI. Going value 263-285

XXII. Depreciation 285-317

XXIII. Items eliminated by Master from appellee's actual operating expenses 317-331

XXIV. Deficiencies in appellee's earnings below fair return . 331-339

XXV. Judgment for appellee should be affirmed 339

INDEX TO PRINCIPAL TABLES PRINTED IN THIS BRIEF BY WAY OF SUMMARIZING THE EVIDENCE

PAGE

Comparison of unit operating costs found in prior suit (258 U. S. 165) as of 1919, which were before this Court in 1922, with operating costs found by Master and District Court in present case 48

Comparison of the investment in total property used in serving appellee's consumers, as found in prior suit as of December 31, 1918, with the investment found as of June 1, 1923, showing net additions and variations (by accounts) 50

Comparison of the actual rates of pay of labor in all of appellee's mechanical departments, in 1913, 1919, 1922, 1923, and 1924 55

Cost of the gas sold by the appellee, showing actual costs of appellee and all system companies, the costs allowed by the Master for 1922, 1923 and as of May 1, 1924, and the appellant's claims as to present cost; this table computing the net income, at statutory standard and rates, applicable to the total property used by appellee in its gas business 63

Sums (unit) required by appellee, over and above operating expenses and taxes, to yield fair return, on different bases of valuation 64

Deficiency of appellee's net operating revenue below eight per cent. return on (1) reproduction cost found by the Master; (2) present value found by the Master; and (3) adjudicated investment (prior findings plus net changes and additions as shown on page 50, post....65–66

Operating costs of appellee, as found by Master, for 1922, 1923, and as of May 1, 1924, with payments for use of other's property excluded 20

Operating costs of all system companies combined, as found by Master, for 1922, 1923, and as of May 1, 1924, with all inter-company payments for use of property, etc., excluded 22

PAGE

Reproduction cost of appellee's property, and of all the property, used and serving appellee's consumers as found by the Master as of June 1, 1923 24–25

Present value of appellee's property, and of all the property, used in serving appellee's consumers, as found by Master as of June 1, 1923 26–27

Investment in appellee's property, and in all the property, used in serving appellee's consumers, as found by Master as of June 1, 1923 (prior findings plus net additions and changes as shown in schedule on page 50, post)..27–28

Master's summary as to earnings under $1.00 rate and earnings required to yield 6 per cent., 7 per cent., and 8 per cent., on (1) reproduction cost; (2) present value; and (3) investment cost as above stated 71

Appellant's estimate of present operating costs (unit) compared with appellee's actual costs and the Master's findings 72–73

Cost to appellee of gas manufactured at Astoria, as compared with cost of gas made at Manhattan plants 91–93

Comparison of appellee's unit operating costs with those of two Brooklyn companies 95

Cost of appellee's taxes, comparing the actual, the Master's allowance, and the further eliminations claimed by the appellant 98

Comparison of the reproduction value proved by appellee, the reproduction value found by Master, and the present value found by the Master 103–104

Details of the $82,051,286.54 of reductions made by the Master in reaching his present value from the reproduction cost proved by appellee 106–107

Comparison of (1) appellee's proofs of the market value of its land, in total and by parcels; (2) appellant's proof as to same land; and (3) assessed values of such land 109–112

Charges made by appellee to affiliated gas companies for reimbursement of expenditures regularly incurred by appellee for the benefit of such affiliated companies, during 1922 and 1923, exclusive of charges for jointly-used property and facilities 213–214

PAGE

Expenditures proved (and deducted) as necessary to restore operating properties of appellee to condition as good as new (comparison with direct structural costs stipulated by appellant) 307

Contested items deducted by Master and Court from appellee's actual 1922, 1923, and May 1, 1924, operating expenses 318–319

List of principal exhibits as to 31–46
Operating expenses and revenues 31–35
Property maps and diagrams 36
Reproduction cost of property 36–42
Original cost of property 43
Working capital 42
Other pertinent matters 44–45
Studies, schedules and summaries spread on the record.45–46

SUBJECT INDEX

PAGE

Access, to properties and accounts 8–9

Answer:

Of Commission 2

Of Attorney-General 2

Assessed valuations 233

Astoria (see "plants," "tunnel," etc.)

Brooklyn, costs and properties in 95–96, 162-163, 169–170

Buildings 4–8, 100, 105, 168

Capacity (see "Plants")

Chicago, rates and conditions in 153–157

Commission:

Powers and duties of, as to appellee 3, 147–152, 160, 167, 189, 193–194, 317, 326–328, 333–339

Rates and standard fixed by 2, 99, 149–152, 189, 193–194

Confiscation, facts showing 18, 60–71, 123–130

Consumers 9–11, 321

Contingencies, reserve for 311–312

Decree, provisions of 3

Deficiency in earnings 63–66, 331–339

Depreciation 122, 285–317

Distribution, cost of 63, 76, 78, 95–97, 187–190

Earnings 15–17, 29, 60–100, 134–138, 147–152, 317–331, 331–339

Exhibits, list of principal 31–46

Expense items 15–17, 29–30, 53–100, 211, 315, 317–331

PAGE

Going value 8, 263–285, 331

Holders 12, 52, 78, 198, 210, 300, 308–311

Inter-company charges 10–17, 61, 190–211, 211–215, 319

Inventories 4–8, 100

Investment 27–28, 48–60, 64, 86, 118–122, 183

Land, usefulness of 5–8, 164–170

value of 5–8, 101, 107–112, 164–170, 232

Mains:

Cost of laying 5–8, 105, 163, 216–231

Inter-connection of 12, 78, 86, 190–211,

New York Mutual property 157–163, 260

Operating expenses 15–23, 29–30, 47–100, 178–190, 183–190, 211, 284, 315, 317–331

Original cost (see "Investment")

Plants:

Astoria 5–8, 10–15, 29, 51, 75–94, 174–178, 183–187, 194–195, 300, 307

14th and 42nd Street 5–8, 11–12, 51, 98, 122, 164–170, 170–178

Manhattan water-gas 5–8, 10–15, 29, 75–94, 157–163, 164–170, 174–178, 183–187, 300, 303, 307

Prices, trend of 6, 47–60, 225–231

paid by appellee 18

Rate litigation expense 317, 322–328

Rates for gas 2, 59–60, 147–152, 153–157, 315, 331–339

Reproduction cost 4–8, 23–27, 53–60, 64, 100–118, 152, 157–163, 164–178, 180, 216–231, 253–263

Restoration, cost of 306–308

Retirement expense 305–306, 313, 328–330

PAGE

Return, amount available for 15–17, 20–22, 61–70, 147–152

rate of 29–30, 123–138, 147–152

Sales of gas 9–11, 196, 234

Services, cost of laying 5–8, 105, 163, 216–231

Stipulations of Attorney-General 4–8, 100

Structural costs 4–8, 100–118

System companies 10–17, 21–22, 95–96, 103–107, 171–178

Taxes, cost of 53, 76, 78, 97–98, 134, 317, 330–331

Transfer-of-gas system 10–17, 190–211

Trial 4–8, 16–18, 101, 138–146, 189, 191–192, 232–233, 252, 279–284

Tunnel:

Astoria 9, 12, 51,78, 101, 162–163, 169, 194–195, 302

Ravenswood 12, 78, 162–163, 169, 194–195, 302

Undistributed costs 5–8, 105, 253–263

Useful property 5–8, 12–14, 51, 100–118, 164–170, 170–178, 194–195

Value, present 23–27, 29, 52–53, 64, 100–118, 118–122, 152, 157–163, 164–170, 170–178, 180, 216–231, 232

Wages, trend of 47–60, 225–231

Working capital 5–8, 234–252

Working papers, access to 8–9

INDEX-DIGEST

PAGE

STATEMENT

The appeal 1
The statute 2
The answer of Commission 2
The answer of Attorney-General 2
The sole appellant 2
The final decree 3
The Commission's powers 3
The decision 3
The stipulations of appellant as to correctness of appellee's inventories and estimates of reproduction cost, usefulness of property, etc. 4–7
The issues remaining under stipulations 7–8
The access of defendants to appellee's properties and accounts and advance checking of exhibits 8–9

Summary of the facts and findings:

Consumers and sales 9–10
Manufacture and purchase of gas 10–11
Plants and capacities 11–12
Properties used by appellee 12–13
Extent of use of Astoria plant 13–15
Inter-connection of mains 14–15
Scope of issues and proofs as to operating costs 15–16
Basis of Master's findings as to operating costs 17–18
Reasonable operating expenses uncontroverted in the testimony 18
Master's drastic eliminations from actual outlays 18
Amounts found as operating costs of appellee 19–21
Amounts found as operating costs of system companies 21–22

PAGE

Special Master's action as to amount and value of property 23–24

Reproduction cost of property owned and used by appellee 24

Reproduction cost of all property used by appellee.. 24–25

Reproduction costs proved and present values found. 25–27

Present value of all property used in serving appellee's consumers 26–27

Investment in properties used in serving appellee's consumers 27–28

Fundamental errors of appellant's brief..... 29–30

List of principal exhibits:

As to operating revenues and expenses..... 31–35

As to amount of property and its value..... 36–43

(a) Property maps and diagrams 36

(b) Reproduction cost of property 36–42

(c) Working capital 42

(d) Original cost of property 43

As to other pertinent matters 44–45

Studies, summaries and schedules spread on record. 45–46

ARGUMENT AS TO CONFISCATION

I. Trend of wages and prices since 1922 decision of this Court (258 U. S. 165); present and prior findings of appellee's costs and properties compared 47–60

Table of present and prior findings as to unit operating costs 47–48

Present and prior findings as to investment .. 48–52

Present and prior valuation 52–53

Increases in wages and prices explain slight increases in unit costs since 1919..... 53–54

Present findings follow logically from those previously affirmed 53–54

PAGE

Rates of pay of labor, 1919–1924 55–56

Prices of materials 56–57

Appellant's testimony and exhibits 57–58

1924 cost of materials in place, compared with previous years 58-60

II. Statute clearly confiscatory 60–71

Table of actual operating costs and Master's findings, showing net income available for return, under statutory standard and rates.. 63

Sums required to earn a fair return 64

Deficiencies in earnings below a fair return, on the different bases of valuation and earnings 65–66

Return permitted by statutory rate and standard 67–71

III. Appellant's present "estimate" of operating costs 72–98

Table showing his "estimate" in comparison with actual costs 72

Appellant constantly shifts and revises his own estimates 73–76

Mis-statements underlying appellant's attack on appellee's actual operating costs 77–78

Bases of claimed reductions in allowances for manufacturing cost of gas..... 79

(1) Should the Manhattan plants be abandoned and all the gas made at Astoria? 79–88

Court nor Commission could not so dictate management and method 80–82

Appellant's own expert advised continuance of Manhattan plants 82–86

Additional investment and annual costs involved in removal of plants from Manhattan 86–88

(2) Can appellee obtain Astoria gas for Manhattan consumers more cheaply than from Manhattan plants? 89–93

PAGE

Testimony and summary tables showing slightly higher cost of Astoria gas in Manhattan 91–93

(3) If Manhattan plants are continued, should appellee nevertheless be allowed only the operating costs at Astoria? 93–94

Fallacies of this contention 94

Plants are all operated as a unit, for economy in the total production 94

Further reductions claimed by appellant from distribution and other expenses 95–97

Further reductions claimed by appellant in cost of taxes 97–98

IV. Additional cost of 650 B.t.u. gas 99–100

Summary of undisputed testimony that additional cost is 5.02 cents per thousand cubic feet of gas sold 99–100

V. Conservative bases of Master's findings as to amount and value of property 100–118

Comparison between the facts proved by appellee as to reproduction cost and present value of the property used by the appellee, and the reproduction cost and present value found by the Master and Court 101–107

Table showing drastic deductions made by Master from appellee's' undisputed proofs... 104

Conservative bases of the land values fixed by the Master (tables) 108–112

Rule of reproduction cost as present value not involved in this case 113–118

Master did not, as a matter of law or fact, give undue weight, or even adequate weight, to present construction costs, wages, and prices affecting value 118

VI. Appellant's $84,000,000 "rate base" less than the adjudicated original cost 118–122

Appellant's mode of "computing" a present value less than original cost 120

PAGE

Effort to re-litigate issues adjudicated in prior suit 121

Prior findings may not be disregarded..... 121–122

VII. Appellant's claim that return of less than six per cent. upon less than original cost is sufficient 123–138

The findings as to required rate of return, upon the undisputed testimony below..... 124

(A) The $1.00 rate would inevitably yield less than four per cent. upon any "rate base" that could be reached under any concept of valuation 125–126

(B) Statutory regulation of rates will not be permitted to reduce below eight per cent. the earnings of the private capital embarked in the appellee's business ... 126–134

(C) Eight per cent. is fully required by the uncontradicted testimony in this case.. 134–136

(D) Appellant's brief shows no reason for disturbing the finding of the District Court as to rate of return 136–138

ARGUMENT IN REPLY TO APPELLANT'S BRIEF

VIII. Appellant's attacks on the Court and Master... 138–146

Charges of bias and virtual disqualification, against Master 138–139

Charges of irregularity and neglect of duty, against the Court 140–142

Every Circuit and District Judge, and every Special Master, has ruled against this rate and standard 142–144

Prior litigation involving the statutory rate of $1.00 144–146

IX. Rates charged by appellee since 1920..... 147–152

Appellee never "free of all regulation" in 1921 or 1922 147–150

Appellant's inferences shown to be based on bad law and worse mathematics 150–152

Regulation and management 152

PAGE

X. Appellant's claims as to rates charged for gas in other cities 153–157

Record does not show rates charged elsewhere or costs and conditions controlling such rates 153

Futility of superficial comparisons merely of rates 154

Rates and conditions in Chicago 154–156

Population or its density do not determine cost of gas; other factors more influential 155–157

Conditions which make for high costs in New York City 156–157

"Load factor" is relatively unfavorable in appellee's territory 155–157

Unreliability of comparisons between 1914 and 1923 rates 156–157

XI. Appellee's "rate base" as compared with unit price paid by appellee, with Commission approval, for New York Mutual property in 1922 157–163

Erroneous mathematics have misled appellant 158

Corrected figures would lead to contrary conclusions 159–160

Commission's findings destroy his inferences and sustain the Master's valuation as conservative 160–161

The unit valuation of Brooklyn properties ... 162–163

XII. Manhattan plant-sites not "too expensive" 164–170

Appellant's claims refuted by his stipulations and by testimony of his witnesses 166–167

Findings of Courts and Commission as to Manhattan plant-sites 167–169

Comparisons with cost of land in Brooklyn... 169–170

XIII. 14th and 42nd Street plants (retired late in 1923) 170–178

Admissions of appellant's engineering witness 171

PAGE

The action and opinion of the defendant Commission 171–172

Review of the uncontradicted testimony for appellee 172–176

Appellant's unsound figures as to "unit cost of gas" at those stations 176–177

Judgment of appellee's executives should control 177–178

XIV. Judge Hand's decision in appellee's prior suit (267 Fed. 231) 178–190

Attorney-General's "frivolous" attack on Judge Hand in prior suit 179

Appellant still refuses to respect Judge Hand's findings on questions of law or major questions of fact 179–180

Judge Hand ruled that present value was present reproduction cost new without any deduction for depreciation 180

Judge Hand's valuation at 1919 prices was $130,000,000, which would mean at least $149,000,000 after net additions to June 1, 1923 181–183

Appellant refuses to respect Judge Hand's findings even as to the amount of the investment 183

Judge Hand's computations as to operating expenses based on evidence and issues before him, largely inapplicable to present facts 183–184

Judge Hand's computations "pared down unsparingly," and "cut ruthlessly," to see if the rate could be sustained with everything decided against the appellee 185–186

Changes in operating conditions and costs since 1919 186–187

Differences between the present and former proofs as to distribution and general expenses 187–189

The Commission's rate decision of August 30, 1922, did not follow Judge Hand as to operating expenses 189–190

PAGE

XV. Transfer-of-gas system and interconnection of mains 190–211

Nothing ulterior or mysterious about it 190

Conscientious effort to develop the fairest and most accurate bases of payment 190–193

The Commission sustains and follows the bases adopted by the companies 193

Appellant's criticisms replied to 193–196

The interconnection of mains and transfer-of-gas system described 197–199

Bases of inter-company charges for gas transferred and use of facilities 200

Plants on the transfer-of-gas system and operating conditions at such plants 200–202

Transfer of gas by one gas company to another, and ascertainment of requirements of each company 202–206

Jointly-used properties and facilities 206–211

XVI. Inter-company charges and their apportionment 211–215

Payments to the appellee for services rendered to other companies (schedule for 1922 and 1923) 212–215

No warrant for any further credits to appellee's operating expenses 215

XVII. Value of mains and services 216–231

Master's drastic reductions from valuations proved 216

Appellant's assertions replied to 217–224

Urgent grounds for increase rather than reduction in Special Master's figures as to mains and services 225–231

XVIII. Value of land 232–233

Appellant makes no issue for review for this Court 232

Conservative bases of Master's determinations 233

Appellant's valuations approximated the assessed valuations 233

PAGE

XIX. Working capital 234–252

Master's allowance much too low 234

Amounts allowed in prior suit (258 U. S. 165) 234

Uncontradicted evidence disregarded 236–237

Nature of working capital 237–239

Necessity that an adequate amount be allowed for working capital 239–240

Elements of required working capital 240–241

No deduction for accounts payable 241–244

Working capital required by appellee and The Astoria Company 244

Amounts shown to be needed 245–246

Mr. Brundage's testimony as to actual and reasonable working capital 247–249

Colonel Miller's estimate of working capital .. 249

Comparison of the Brundage and Miller estimates 249–252

Minimum amount allowed should be increased rather than reduced 252

XX. Undistributed structural costs 253–263

Special Master and District Court cut most drastically the sums shown by the uncontradicted testimony to be required for these actual but undistributed costs 253–256

Recent decisions as to amounts to be allowed for undistributed structural costs 256–257

Undistributed structural costs are actual and inescapable elements of cost of physical property 257–259

The reasonableness of the undistributed costs testified to by Colonel Miller have been attested by other tribunals 259–263

XXI. Going value 263–285

Appellant's assertions replied to 263–264

PAGE

Master cut drastically the uncontradicted amounts proved by appellee 264–266

New York State Courts require the allowance of going value as a part of property on which utility may earn a return..... 267

Modes of proof recognized in the recent decision 270–274

Controlling principles as to proof of existence, amount, and present worth, of elements of going value 274–279

Defendants offered no proofs as to going value 280–281

Comprehensive exhibits and testimony as to appellee's going value 281–284

Amount allowed for going value should not be decreased because partly paid for through operating expenses 284–285

XXII. Depreciation 285–317

Not a controversial issue in this case, on the facts of this record 285

Deductions made by Special Master, in reaching and stating present value 286

Appellant's contentions replied to: 287

(I) As to the claim that this appellee is urging some strange, unsupported view: 287–296

Appellee has no contentions other than the decisions of this Court in

(1) The *Pacific Gas and Electric Company* case (265 U. S. 403) 288–290

(2) The New Jersey Telephone case *(New York Telephone Company)* (—— U. S. ——), decided April 12, 1926. 290

(3) The *City of Fort Smith* case (—— U. S. —— ; aff'g 294 Fed. 102), decided January 25, 1926 290–292

Preponderance of State and Federal authority 294–296

PAGE

(II) As to the claim that this case should be sent back because the Special Master did not make deductions for which there was no foundation in the evidence: 197–311

Special Master followed the evidence 297–298

Decisions required no other action 298

Admissions of the appellant's engineering witness (Mr. Little) 298

Testimony of Chief Engineer Woods 299

" " Colonel Miller 299–300

" " Mr. Alrich 301

" " Mr. Burt 301

" " Mr. Simpson 301

" " Mr. Trout 301

" " Mr. John Vipond Davies .. 302

Obsolescence or inadequacy of equipment or other property 302–305

The significance of the retirements of units of property 305–306

Appellant's brief does not reliably present the facts as to this record 306

Table showing estimates of cost to restore structural property to condition as when new 307

The claimed obsolescence of Manhattan holders 308–310

Appellant's table and attempt to compare unit costs of the "older" and "newer" holders 310–311

(III) As to the claim that the "contingencies reserve" of the appellee should be deducted, in some guise of "depreciation": 311–313

No charge to provide for any "accrued" depreciation is included in the appellee's expenses or rates 312–313

The causes for which retirements of property take place 313–314

PAGE

Appellant's depreciation theory would add several cents uselessly to the required rate for gas 315–316

No need for an additional burden on the rate.. 316–317

XXIII. Items eliminated by Master from appellee's actual operating expenses 317–331

Table showing the amounts of the contested items deducted by Master from actual costs 318–319

Appellee's views as to items unwarrantedly excluded 319–331

(1) Expense of gas supply inspection 320–321

(2) Interest on consumers' deposits 321–322

(3) Expense of rate litigation in Court 322–326

(4) Cost of proceedings by and before the Public Service Commission..... 326–328

(5) Renewals and replacements 328–330

(6) Interest on unpaid taxes..... 330

(7) Excess dividends tax 330–331

XXIV. Deficiencies in earnings due to rates limited by statute 331–339

Proofs excluded and this item not taken into account by Master 331–332

Importance of this item decided against the appellee 332–333

Pertinent legal principles 333–335

Recent decisions of Federal and State Courts.. 335–336

Decision of the New York State Court in January of 1925 336–337

XXV. The decree of the District Court should be affirmed 339

TABLE OF CASES

PAGE

Adirondack Power and Light Co. v. Public Service Commission (211 App. Div. [N. Y.] 272).....127, 131

Adirondack Power & Light Corp., People *ex rel.* v. Public Service Commission (200 App. Div. 268).. 337

Alpha Portland Cement Co. v. Lehigh Nav. El. Co. (P. U. R. 1924E, 737; 24 Rate Research, 36; Pennsylvania Public Service Commission)..... 326

Alton Water Co. v. Commerce Commission (279 Fed. 869) 127

Banton v. Belt Line Railway Corporation (268 U. S. 413) 81, 153

Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia (262 U. S. 679) 114, 126, 128, 268, 272

Board of Public Utility Comrs. of N. J. v. New York Telephone Co. (—— U. S. ——).....150, 243, 287, 290, 293, 311

Bonbright v. Geary (210 Fed. 44)..... 295

Bronx Gas and Electric Company, Re (6 State Dept. Repts. 76, 94) (New York Public Service Commission) 260

Bronx Gas & Electric Co. v. Prendergast (1 Fed. [2nd], 377) 1, 128, 132, 138, 140, 141, 144

Bronx Gas and Electric Co. v. Public Service Commission (P. U. R. 1923A, 255; 28 N. Y. St. Dept. Repts., 329; affd. 208 App. Div. 780; 208 App. Div. 806) 127, 145, 237, 259, 296

Bronx Gas & Electric Co. v. Public Service Comn. (190 App. Div. 13) 148

Bronx Gas & Electric Co., City of New York v. (113 Misc. 166) 149

PAGE

Brooklyn Borough Gas Company, In re Gas Rates of (Case 79-E, decided May 10, 1922) 80

Brooklyn Borough Gas Co. v. Prendergast (Report of Special Master Burlingame; filed Oct. 2, 1926; not yet officially reported) 117, 144, 238, 254, 257, 262, 270, 295, 325, 326

Brooklyn Borough Gas Co. v. Public Service Commission (17 N. Y. St. Dept. Rept. 81; P. U. R. 1918F, 335) 146

Brooklyn Union Gas Co. v. Newton (2 Fed. [2nd], 118; 258 U. S. 604) 94, 138, 139, 146, 238

Brooklyn Union Gas Company v. Prendergast (7 Fed. [2nd], 628; P. U. R. 1926A, 412) 133, 140, 143, 162, 169, 259, 273, 295

Brooks-Scanlon Corporation v. United States (265 U. S. 106) 114

Brush Electric Co. v. Galveston (258 U. S. 388) 126

Buck, as Mayor of Buffalo v. International Railway Co. (N. Y. St. P. S. C.; 27 Rate Research, 40; 1921) 269

Chesapeake and Potomac Telephone Co., Re (P. U. R. 1916C, 925, 951) 258

Chesapeake & Potomac Tel. Co. of Baltimore City v. P. S. C. of Md. (Spec. Stat. Ct.; Dist. of Md.), (3 Fed. [2nd], 938) 269

Chicago, Milwaukee & St. P. Ry. Co. v. Tompkins (176 U. S. 167) 139

Chicago Railways Co. v. Illinois Commerce Commission (277 Fed. 970; Spec. Stat. Ct.) 80

Citizens' Gas Co. of Hannibal v. Public Service Commission of Missouri (8 Fed. [2nd], 632) 81, 114, 270, 273

PAGE

City of Cincinnati v. Ohio Public Utilities Commission (—— Ohio ——; 148 N. E. 817) 295

City of Elizabeth v. Board of Public Utility Commissioners of New Jersey (123 Atl. 358) 129

City of Erie v. Public Service Commission of Pennsylvania (278 Pa. St. 512; 123 Atl. 471) 81, 114

City of Fort Smith, Ark., v. Southwestern Bell Telephone Co. (294 Fed. 102; —— U. S. ——; 46 Sup. Ct. Repr. 206; 70 L. Ed. 236; affirmance by this Court on January 25, 1926) 115, 126, 128, 268, 270, 279, 293

City of Houston v. Southwestern Bell Tel. Co. (259 U. S. 318) 287, 290-292

City of Minneapolis v. Rand (285 Fed. 818) 275, 284

City of Winona v. Wisconsin-Minnesota Lt. & P. Co. (276 Fed. 996) 295

Columbus Gas Light Co. v. Public Service Commission of Indiana (193 Ind. 399; 140 N. E. 538) ..128, 270, 336

Consolidated Gas Co. v. Newton (267 Fed. 231; affd. 258 U. S. 165) 27, 45, 47, 52, 77, 114, 120, 142, 146, 147, 178-190, 192, 242, 293, 296, 315

Consolidated Gas, Electric Light & Power Co. of Baltimore, Re (abstracted in P. U. R. 1924B, 684; 23 Rate Research 176 [Maryland Public Service Commission]) 326

Darnell v. Edwards (244 U. S. 564) 153

Denver v. Denver Union Water Co. (246 U. S. 178) .. 268

Elizabethtown Gas Light Co. v. Board of Public Utility Commissioners of New Jersey (111 Atl. 729) 114

Galveston Electric Co. v. City of Galveston (258 U. S. 388) 134, 268, 270, 271, 273, 337

PAGE

Georgia Railway & Power Co. v. Railroad Commission (U. S. Dist. Ct., N. D. of Ga.; 3 Fed. [2nd], 938; decided September 25, 1924; report of Special Master confirmed and decree entered February 2, 1925 269

Georgia Railway & Power Co. v. R. R. Comn. of Georgia (278 Fed. 242; 262 U. S. 625).....271, 336

Grafton County Electric Light and Power Co. v. State (78 N. H. 330; 100 Atl. 668)..... 284

Hackensack Water Co. v. Board of Public Utility Comrs. (119 Atl. 84; N. J. Sup. Ct.).....335, 337

Havre de Grace & P. Bridge Co. v. Towers as Chairman (132 Md. 16; 103 Atl. 319).....81, 295

Houston v. Southwestern Bell Telephone Co. (259 U. S. 318) 272

Idaho Power Co., Re (P. U. R. 1923B, 52)..... 261

Indiana Bell Telephone Co. v. Public Service Commission of Indiana (300 Fed. 190)..... 127

Kansas v. Southwestern Bell Tel. Co. (115 Kans. 236; 223 Pac. 771)..... 81

Kansas City Southern Railway Co. v. United States (231 U. S. 423, 451) 316

Kings County Lighting Co., Re (2 P. S. C. R., 1st Dist., N. Y. 659) 261

Kings County Lighting Co v. Lewis (202 App. Div. 473; 235 N. Y. 599)..... 146

Kings County Lighting Co. v. Nixon (268 Fed. 143; 258 U. S. 180)..... 146

Kings County Lighting Co. v. Prendergast (7 Fed. [2nd], 192; P. U. R. 1925E, 5 [Spec. Stat. Ct.]; confirming report of Special Master: P. U. R. 1925C, 705) 81, 127, 131, 143, 163, 169, 238, 270, 274, 295

Knoxville v. Knoxville Water Co. (212 U. S. 1)..... 272

PAGE

Landon v. Court of Industrial Relations of Kansas (269 Fed. 433) 294

Lincoln Gas Co. v. Lincoln (250 U. S. 256)..126, 269, 284

Los Angeles and Salt Lake Railroad Co. v. United States (8 Fed. [2nd], 747) 81

Louisiana Water Co. v. Public Service Commission of Missouri (294 Fed. 954) 335, 337

McAlester Gas and Coke Co. v. Corporation Commission of Oklahoma (227 Pac. 83) 127

Michigan Public Utilities Commission v. Michigan State Telephone Co. (228 Mich. 658; 200 N. W. 749) 126, 269, 284

Milton v. McGowan W. Lt. & P. Co. (P. U. R. 1923A, 755) 261

Minneapolis Street Railway Co., Re (Minnesota R. R. and Warehouse Comn.; 26 Rate Research, 275; decided March 6, 1925) 269

Mobile Gas Co. v. Patterson as Chairman (293 Fed. 208) 336

Monroe Gas Light and Fuel Co. v. Michigan Public Utilities Comn. (292 Fed. 139 [Spec. Stat. Ct.]; ruling reaffirmed on further hearing: 11 Fed. [2nd], 319; decided February 27, 1926) 114, 134, 268, 273, 294

Morrell v. Brooklyn Borough Gas Co. (231 N. Y. 398).. 3, 148

Municipal Gas Company of Albany v. Public Service Commission of New York (225 N. Y. 89)...2, 153, 333

Murray v. Public Utilities Commission (27 Idaho 603; 150 Pac. 47) 295

Nashville, C. & St. L. Ry. Co. v. United States (269 Fed. 351; 255 U. S. 569).....295, 296

National Water Works Co. v. Kansas City (62 Fed. 853) 269

Newton v. Central Union Gas Co. (259 U. S. 101).... 146

PAGE

Newton v. Consolidated Gas Co. (258 U. S. 165; affg. 267 Fed. 231) 31, 47, 121, 127, 148, 150, 179, 192, 242, 293, 333

Newton v. New York Mutual Gas Light Co. (259 U. S. 101) 51, 146, 261

New York and Queens Gas Co. v. Newton (269 Fed. 277; affd. 258 U. S. 178).....127, 144, 145, 238, 293, 296, 315, 321, 325

New York and Queens Gas Co. v. Prendergast (1 Fed. [2nd], 351; appeal dismissed 268 U. S. 708) ..127, 132, 133, 138, 140, 141, 144, 237, 254, 286, 292-294, 322, 331

New York and Richmond Gas Co. v. Nixon (203 App. Div. 860; 204 App. Div. 838) 145, 296

New York and Richmond Gas Co. v. Prendergast (10 Fed. [2nd], 167 [Spec. Stat. Ct., E. D. of N. Y.]; P. U. R. 1925E, 19)..... 1, 81, 121, 126, 131, 132, 143, 236, 237, 238, 256, 257, 259, 269, 272, 274, 284, 295, 326

New York Telephone Co., Re (N. J. Board of P. U. Comrs. (P. U. R. 1925 C, 767; decided December 31, 1924) 269

New York Telephone Co. v. Prendergast (300 Fed. 822 [Spec. Stat. Ct.]; S. C. on further hearing: 11 Fed. [2nd], 162) 114, 130, 132, 142, 288, 294

Northern Pacific Ry. Co. v. Department of Public Works of Washington (268 U. S. 39)..... 81

Northwestern Bell Telephone Co. v. Spillman (6 Fed. [2nd], 663) 81

Ohio Utilities Co. v. Public Utilities Commission of Ohio (267 U. S. 359) 81, 105, 114, 236, 237, 238, 253, 256, 266, 330

PAGE

Omaha v. Omaha Water Co. (218 U. S. 180)..... 269

Ottinger v. New York and Queens Gas Co. (268 U. S. 708; dismissing appeal from 1 Fed. [2nd], 351)..1, 295

Pacific Gas and Electric Co. v. San Francisco (273 Fed. 937; 265 U. S. 403).....127, 129, 287-289, 292, 293, 317

Pacific Telephone & Telegraph Co., In re (Decided February 21, 1922; P. U. R. 1922 C, 248; 20 Rate Research, 387) 80

Pennsylvania Gas Co., People ex rel. v. Public Service Comn. of N. Y. (211 App. Div., 253; decided January 7, 1925) 336-337

People ex rel. Delaware and Hudson Co. v. Stevens, as Chairman (197 N. Y. 1) 81

People ex rel. New York State Rys. Co. v. Public Service Comn. (202 App. Div. 576)..... 257

People's Gas and Electric Co. of Oswego v. Public Service Commission of New York (214 App. Div. [N. Y.] 108; 211 N. Y. Supp. 662; decided July 17, 1925) 114, 127, 267

Petersburg Gas Co. v. Petersburg (132 Va. 82; 110 S. E. 533) 114, 336

Pioneer Telephone and Telegraph Co. v. Westenhaver (29 Okl. 429; 118 Pac. 354)..... 127

Roanoke Waterworks Co. v. Commonwealth of Virginia (124 S. E. 652 [Va.]) 114

Southern Bell Telephone and Telegraph Co. v. Railroad Commission of South Carolina (5 Fed. [2nd], 77) 270, 273, 295

Southwestern Bell Telephone Co. v. City of Fort Smith (294 Fed. 102) 279

Standard Oil Co. v. Southern Pacific Co. (268 U. S. 146) 113, 295

State of Kansas ex rel. Hopkins v. Southwestern Bell Tel. Co. (115 Kan. 236; 223 Pac. 771)..... 295

PAGE

State of Missouri ex rel. Southwestern Bell Telephone Co. v. Public Service Commission of Missouri (262 U. S. 276) 81, 114, 126

State Public Utilities Commission v. Springfield Gas and Electric Co. (291 Ill. 209) 269

Streator Aqueduct Co. v. Smith, as Chairman (295 Fed. 385) 269, 336

Town of Milton v. Railroad Commission of Wisconsin (185 Wisc. 294; 201 N. W. 381) 269

Van Wert Gas Light Co. v. Public Utilities Commission of Ohio (299 Fed. 670) 114

Venner v. Urbana Water Co. (174 Fed. 348) 269

Wakeman v. Wheeler and Wilson Co. (101 N. Y. 205). 276

Westinghouse Electric and Mfg. Co. v. Denver Tramway Co. (3 Fed. [2nd], 285) 236, 257, 266, 294

Willcox v. Consolidated Gas Co. (212 U. S. 19) 25, 27, 28, 233, 295

Supreme Court of the United States

OCTOBER TERM—1926

ALBERT OTTINGER, as Attorney-General of the State of New York,
Defendant-Appellant,

against

CONSOLIDATED GAS COMPANY OF NEW YORK,
Plaintiff-Appellee.

No. 357.

APPELLEE'S BRIEF AS TO CONFISCATION

This case is here on appeal by the Attorney-General of the State of New York, from a final decree (R. 322-26) of the United States District Court for the Southern District of New York, in favor of the Consolidated Gas Company of New York (the plaintiff below), entered on May 7, 1925, after final hearing before Winslow, *D.J.*, upon the report and opinion of James G. Graham, Esq., Special Master (6 Fed. [2nd], 243).

NOTE: This brief deals primarily with the confiscatory effects of the $1.00 rate and 650 B.t.u. standard prescribed by Chapter 899 of the Laws of the State of New York, and also contains the Appellee's Reply to the Appellant's Brief. In a separate brief filed herewith, the appellee has discussed grounds of attack upon the constitutionality of the statute (aside from confiscation), most of which are also before this Court in the other two gas-rate cases contemporaneously argued, and were also identically involved in *Ottinger* v. *New York & Queens Gas Company* (268 U. S. 708; dismissing appeal from 1 Fed. [2nd] 351); in *The Bronx Gas and Electric Company* v. *Prendergast* (1 Fed. [2nd] 377), in which the Attorney-General has prosecuted no appeal; and in *New York and Richmond Gas Company* v. *Prendergast* (10 Fed. [2nd], 167; Spec. Stat. Ct.; E. D. of N. Y.), from which the Attorney-General has taken no appeal.

The statute (R. 2145) undertook to reduce from $1.15 to $1.00, per thousand cubic feet, the rate chargeable by the appellee for gas, and undertook to prescribe that the gas sold at this lowered rate should have a calorific content of not less than 650 B.t.u. per cubic foot (R. 2145).

The answer of the defendant Commission (R. 58-62) admitted that in pursuance of authority delegated to it by the Legislature, the Commission, by orders dated August 30, 1922, prescribed for the appellee a "just and reasonable" rate of $1.15 and a calorific standard of not less than 537 B.t.u. on monthly average; that these orders "were *based upon facts found* by the Commission in its said investigations and hearings" (R. 59); and that "it was stated and determined by the Commission" that its rate "should continue in force until the 30th day of September, 1923, and thereafter until the Commission should otherwise order" (R. 59).

The answer of the defendant Attorney-General (R. 54-57) does not respect the presumption of reasonableness which attaches to the rate orders of the State Commission (*Municipal Gas Company* v. *Public Service Commission,* 225 N. Y. 89, 99), and does not claim that costs and conditions *changed* after the investigation and orders of the Commission, so that a $1.00 rate for 650 B.t.u. gas thereby *became* remunerative. The answer alleges that the rates fixed by the Commission "were more than necessary to compensate the plaintiff" (R. 55) and were "excessive, unreasonable and more than necessary to compensate the said plaintiff for its public service" (R. 56).

The appellant in this Court is solely by the defendant Attorney-General, to whom the statutes of the State entrust no regulatory or supervisory powers or duties as to the rates of gas companies. The defendant Public Service Com-

mission, which long has had broad regulatory powers over the rates, properties, accounts, service, and securities of the appellee and other gas companies, did not appeal from the decree, and an order of severance was entered (R. 354). The Commission had participated actively in the conduct of the trial before the Special Master, in seeing to it that any available facts in support of the statute were fully and fairly brought out.

The final decree (R. 322-326) contains the usual clause preserving the right of any party to move to vacate or modify the injunction "because of any change of circumstances since the entry thereof" (R. 324-326). No such application has been made by any party, since the entry of the decree on May 7, 1925 (R. 326).

The final decree also contains a provision that

> "Nothing contained herein shall be construed to limit, prejudice or restrict the exercise of the jurisdiction and power of the Public Service Commission of the State of New York" (R. 326).

Under the settled law and the regulatory policy of the State of New York, the plenary powers of the Commission over the appellee's rates and the quality of gas to be furnished by it, became fully effective immediately upon the entry of the final decree enjoining the enforcement of Chapter 899 of the Laws of 1923.

> *Morrell* v. *Brooklyn Borough Gas Co.*, 231 N. Y. 398.

The opinion (R. 68-149) and report (R. 149-216) of the Special Master, and the opinion of the District Court (R. 315-321), state the facts and the issues more fully and more clearly than could be undertaken in a brief, and we refer to them (6 Fed. [2nd], 243).

The appellant's brief was received on October 8th—ten days before the oral argument in this Court. Unrevised page proofs were furnished to appellee's counsel on October 5th. The circumstances of the preparation of the briefs in this case are well known to the Court.

Narrow scope of the controversy as to the amount, use and reproduction value of the property used in the appellee's gas business

Tables which show compactly the appellee's proofs, the Master's findings, and the appellant's claims, as to the appellee's revenues and expenses and the effects of enforcement of the statutory rate and standard, are printed on pages 63-66, *post.*

Tables which summarize compactly the appellee's proofs and the Master's action as to the appellee's property, its reproduction cost, present value, and original cost, are printed on pages 100 to 112, *post,* with references to such proofs as the defendants offered on these issues.

Never before was there a New York City gas-rate case before this Court, in which there was so little controversy left as to the amount of the property, the correctness of the inventoried quantities, the reasonableness of the estimated reproduction costs of the labor, material, etc., entering into the properties, and the used and useful character of the properties as inventoried and appraised.

All of these issues were fiercely litigated by the defendants throughout the trial, at a great waste of time, money and energy and a great tax upon the credulity and patience of the Special Master, and Court, and upon the time and endurance of witnesses and counsel. The futility of prac-

tically all this has now been conceded by stipulation, which leaves little or no room for argument as to the correctness of the result reached by the District Court.

Scattered through this record are various stipulations which have been made by the appellant Attorney-General since the trial. They relate to and cover the various inventories and appraisals presented by the appellee. As to form and substance, that at R. 2442 as to the Miller exhibits is typical; the others appear at R. 2402-2406, 2434-2437, 2483-2484, 2538-2539, conceding the accuracy of the various appraisal exhibits presented by Colonel Miller, Mr. Burt, and the other witnesses as to the appellee's properties, with certain rather limited exceptions hereinafter specified.

These various stipulations provide, in substance, as follows:

(1) That all of the physical properties listed, inventoried and appraised in behalf of the appellee were *in existence* as shown in the appraisal exhibits, on June 1, 1923;

(2) That all of the physical properties inventoried and appraised in the appellee's exhibits *were used and useful in the appellee's gas business* on June 1, 1923; excepting that the appellant reserved his right to attack the useful character of the properties shown as situated at the 14th and 42nd Street plants, which the appellee claims were used and useful during 1922 and until after June 1, 1923, but were admittedly sold and dismantled by the appellee late in that year (see Point Thirteen, *post*);

(3) That "the *quantities, units, unit prices, and total costs,*" *contained in the appellee's appraisal exhibits*

> *are "a correct estimate of the cost to reproduce, as of June 1, 1923, each and every item on a labor, material and sub-contract basis,* as the same is described in the testimony" of the various witnesses; provided, however, that this concession does not apply to (i) land; (ii) mains and services; (iii) undistributed structural costs; (iv) working capital, and (v) going value; the appellant reserving the right to challenge the reproduction estimates as to (i) and (ii) and both the reproduction estimates and the propriety of including (iii), (iv), and (v).

The appellant's brief contains no reference to these stipulations, and advances several arguments which quite ignore them.

Appellant has stipulated the correctness of the work of the witnesses whose credibility his brief still attacks

At numerous points in the appellant's brief, are regrettable references to the appellee's appraisal witnesses. Colonel Miller was denounced as "merely performing his zealous duty as a professional witness biased by his connection with the company" (R. 81) and his desire to get more business from it. Colonel Miller was said to be "a great multiplier" (page 97). Most vindictively of all, appellant referred to the faltering of "*whatever faith anyone ever had in Colonel Miller's credibility* (page 98).

These vicious and unwarranted slurs come from counsel for a public official who has just *admitted* his confidence in the integrity, reliability and competence of Colonel Miller's appraisal work, and has formally stipulated, in the

name of the People of the State of New York, that every piece of apparatus and equipment, every item of physical property, which Colonel Miller credited the appellee with owning or using, was correctly listed by Colonel Miller, in correct description, units and quantities; was in fact used and useful by the appellee as sworn to by Colonel Miller; and was estimated by him at the correct reproduction cost of the labor and materials entering into each item of such property, all exactly as shown in the exhibits and testimony of this "biased" and unbelievable "multiplier"! In making such a stipulation binding the State, the Attorney-General was guilty of serious impropriety unless he *knew,* as he did, that no bias or interest could lead Colonel Miller to claim for the appellee an item of property it did not have or to estimate for any item of such property an unreasonable or excessive cost. The appellant has *stipulated* the complete faith in Colonel Miller's credibility which his brief denies!

Issues remaining under the stipulations

As to the *property* used in serving the appellee's consumers, these stipulations narrow the controverted issues to the following:

(1) Whether the 14th and 42nd Street plants were used and useful during 1922 and on June 1, 1923; discussed under Point Thirteen, *post;*

(2) Whether the Special Master and District Court placed too high a value upon the *land* (discussed under Point Eighteen, *post*), and too high a reproduction value upon the *mains and services;* (discussed under Point Seventeen, *post*);

(3) Whether the Special Master and District Court did, as a matter of law, give too much weight to these correct and reasonable estimates of reproduction cost of the admittedly existent and useful physical property; this question of present value being discussed under Point Five, *post;*

(4) Whether any allowance should be made, and how much, for undistributed structural costs (discussed under Point Twenty, *post*), for working capital (discussed under Point Nineteen, *post*), and for going value (discussed under Point Twenty-one, *post*).

Access of defendants to appellee's plants, properties, accounts and records

The appellant was not in any way stipulating "in the dark" as to the appellee's inventories, appraisals or properties. Judge Winslow's order gave the defendants the fullest access to all the properties and to the books and records, many months in advance of the trial (Ex. No. 220; R. 2050).

The various appraisal and accounting exhibits were generally submitted to the defendants long in advance of the trial, and permits were issued to the appellant's engineers and accountants, to visit the plants and properties, and to inspect accounts, freely and fully (Ex. Nos. 221-227; R. 2050-2052; Ex. Nos. 725-726; R. 2093), in order to check and verify the accuracy of the inventories and the accounting exhibits and form an opinion as to the reasonableness of the estimates of present cost and present value.

The working papers of Colonel Miller, Mr. Burt, Mr. John Vipond Davies, Mr. Woods, Mr. Simpson, Mr. Teele,

Mr. Nickerson, Mr. Trout, and other witnesses were thrown open to the defendant's representatives; and conferences were held by the latter, with the appellee's witnesses, outside of the hearings, in order to assist the defendants in checking the accuracy and soundness of the appraisal and accounting exhibits.

With all of this access to the properties, checking of the accounts, conferences of the engineers, "spot checking" of the inventories, verification of the vouchers, etc., the defendants did not offer testimony to challenge the actuality of any item of operating or capital expenditure shown in the accounting exhibits, or the existence of any item of property listed in the appraisal exhibits. Only as to land, and the Astoria tunnel, did the defendants offer testimony supporting lower estimates of the reproduction cost. The facts as to the investment were established in the prior suit and were undisputed on this trial.

Summary of facts as to appellee's gas operations

The Master's report and opinion (R. 68-216) contain, of course, the most complete review of the pertinent facts, but some of the more salient matters may be enumerated here. The appellee supplies gas to consumers in the Borough of Manhattan, City of New York, and its properties are practically all in Manhattan. It has mains and other properties in the Borough of The Bronx, which are incidental to reaching and serving consumers in upper Manhattan (R. 464-466, 470).

On January 1, 1922, the appellee had 514,706 consumers (R. 762). On January 1, 1923, it had 555,971 consumers (R. 762). On January 1, 1924, it had 560,189 consumers (R. 776, 1035). The number of consumers stated as of January

1, 1923, included the consumers of The New York Mutual Gas Light Company, who were taken over by the appellee on August 31, 1922 (R. 762), upon the Commission's approval of the purchase of the property of that company (R. 2167).

During the year 1922, the appellee sold 20,580,285,600 cubic feet of gas (Finding No. 55; R. 176; Ex. No. 813; R. 2316-20) and, during the year 1923, it sold 24,057,694,200 cubic feet of gas (Finding No. 55; R. 176; Ex. No. 816; R. 2330-2334).

The appellee does not own manufacturing plant capacity sufficient to supply all of the gas for the requirements of its consumers. The appellee, during the year 1922, manufactured at its own plants 8,204,826,000 cubic feet of gas and purchased from The Astoria Light, Heat & Power Company (hereinafter called "The Astoria Company"), The New Amsterdam Gas Company (hereinafter called "The New Amsterdam Company"), The Standard Gas Light Company of the City of New York (hereinafter called "The Standard Company"), and (during the eight months ended August 31, 1922) The New York Mutual Gas Light Company (hereinafter called "The Mutual Company") a total of 13,866,707,100 cubic feet of gas. The total quantity of gas made and purchased by the appellee, to meet the requirements of its own consumers, during the year 1922 amounted thus to 22,071,533,100 cubic feet of gas (Ex. No. 813; R. 2316-2320; see also Finding No. 49; R. 174).

During the year 1923, the appellee manufactured at its own plants 9,804,127,000 cubic feet of gas and purchased 15,419,848,500 cubic feet of gas from The Astoria Company, The New Amsterdam Company, and The Standard Company. The total quantity of gas made and purchased

by the appellee during the year 1923 amounted thus to 25,223,975,500 cubic feet (Ex. No. 816; R. 2330-2334; see also Finding No. 49; R. 174).

The proofs upon the trial and the findings of the Court below covered the appellee's operations for the year 1922, the year 1923, and the first four months of the year 1924 (R. 168-169), and the rate was tested in the light of the results for that period of two years and four months, with especial reference to the year 1923 and the costs as of May 1, 1924 (Ex. Nos. 813, 816, 888, 889, 1017).

The appellee, at the time Chapter 899 of the Laws of 1923 was enacted by the Legislature, had manufacturing plants of its own at 11th, 14th, 21st, 42nd and 99th Streets, all in the Borough of Manhattan, of which plants the 11th, 21st and 99th Street plants produced gas by the carbureted water-gas process, and the 14th and 42nd Street plants by the coal-gas process (R. 152; 1080).

In June of 1923, the appellee's 14th and 42nd Street coal-gas plants were used only as reserve or stand-by plants, and had been so used and maintained for some years past, a relatively small amount of gas having been actually manufactured and sent out at either plant, although both plants were kept in a condition to be operated to capacity should the occasion arise (R. 84, 1167, 1182, 1240, 1271).

Their capacity was admitted by the appellant's engineering expert (R. 1878) to be needed in "peak load" periods until substitute capacity was provided at other Manhattan locations, as was done in 1923 (R. 152). These two coal-gas plants were withdrawn from service on October 31, 1923, the capacity of the 21st Street water-gas plant having been increased to an amount at least equalling that of the two plants discontinued (R. 152), so that the manufacturing capacity owned and operated by the appellee at

the time of the trial was substantially the same as it was on June 1, 1923, although differently distributed (R. 153). As to the views of the defendant Commission as to these two plants, see R. 42-44. As to the detailed testimony concerning these plants, see Point Thirteen, *post*.

The appellee's three water-gas manufacturing plants, known as the 11th Street, 21st Street and 99th Street stations, had an aggregate manufacturing capacity (as distinguished from a normal or working capacity), as of June 1, 1923, of 58,000,000 cubic feet of gas per day. Subsequently, as of June 1, 1923, appellee increased the manufacturing capacity of its 21st Street plant by 9,500,000 cubic feet of daily capacity, making the total present water-gas capacity of the appellee, as of the time of the proofs before the Master 67,500,000 cubic feet of gas per day (R. 152, 377).

The appellee also owns and uses gas storage holders located principally in the Borough of Manhattan (R. 153), and main and branch office buildings and numerous other parcels of land and buildings, occupied by its various operating departments (R. 153).

In lieu of providing such facilities itself and separately, the appellee necessarily used, in part, certain joint facilities owned by other gas companies in the so-called transfer-of-gas-system, consisting of the Astoria and Ravenswood tunnels under the East River, certain connecting mains owned by The East River Gas Company of Long Island City (hereinafter called "The East River Company"), in the vicinity of the termini of these tunnels, and the Harlem River main owned by The Standard Company. In connection with its 63rd Street holder station, in the Borough of Manhattan, the appellee also uses, jointly with

The Standard Company, the adjacent boiler and governor house owned by the latter, at East 62nd Street (R. 190).

The organization of the appellee and its relations to the "affiliated gas companies," controlled by it directly or indirectly through stock ownership, which are engaged in the business of manufacturing and/or furnishing gas in parts of the Boroughs of Manhattan, The Bronx and Queens, are described in detail in the report to the Special Master (R. 74-84), to which we refer.

The combined maximum daily manufacturing capacity of the appellee's Manhattan plants in 1922, was 43,500,000 cubic feet of gas per day (R. 155), whereas to meet its maximum day's demand and provide a moderate reserve, the appellee required plant capacity of 123,593,000 cubic feet of gas a day; and the excess of the appellee's requirements over the plant capacity owned by it, was supplied by other gas companies affiliated with the appellee, to the extent, in that year, of 80,093,000 cubic feet of gas per day (R. 155; Ex. No. 765; R. 1111-12).

In 1923, the plant capacity of the appellee amounted to 67,500,000 cubic feet of gas a day (R. 155), whereas the appellee required, in order to meet the demand of its own consumers and to provide a moderate reserve, a plant capacity of 136,364,000 cubic feet of gas a day; and therefore the appellee, in 1923, used the plant capacity of affiliated gas companies to the extent of 68,864,000 cubic feet of gas per day (R. 155; Ex. No. 766, R. 1112).

The appellee depended, in part, for this necessary supplemental manufacturing capacity, upon the manufacturing facilities of The Astoria Company located at Astoria, across the East River from Manhattan, in the Borough of Queens, such facilities being held available for and used by

the appellee in the production of gas for its consumers (R. 156).

During the year 1923, the manufacturing capacity of The Astoria Company to the extent of 68,864,000 cubic feet per day (R. 156), or approximately 80 per cent. of the total capacity of the Astoria plant, was so used and required by the appellee (Ex. No. 766, R. 1112). During the year 1922, the appellee necessarily and reasonably used for its consumers the plant capacity of The Astoria Company, to the extent of 75,112,000 cubic feet per day; and during the eight months' period prior to the date of its purchase of the gas properties of The Mutual Company on August 31, 1922, the appellee also reasonably and necessarily used plant capacity of that company to the extent of 4,981,000 cubic feet of daily capacity. By the purchase of the plant of The Mutual Company, the capacity of the latter became directly available to the needs of its new owner, materially reducing the amount of manufacturing capacity necessarily purchased by the appellee during the year 1923 (R. 156; Ex. No. 765, R. 1111-1112).

The appellee thus manufactures about two-fifths of its total requirements and buys the rest of its gas from The Astoria Company. The rest of the output of The Astoria Company and the small surplus which the Ravenswood plant of The New Amsterdam Company has over its owner's requirements, are sold to system gas companies other than the appellee (R. 155).

The Master found that the development of the inter-relationship of the gas companies of the Consolidated transfer-of-gas system has been greatly in the interest of the public, as well as of the companies and of the investors in their property (R. 78-79, 81-84).

The appellee's control of the several gas corporations operating within the Borough of Manhattan, the Borough of The Bronx, and part of the Borough of Queens, is shown by the testimony reviewed under Point Fifteen, *post*, to obviate any unnecessary duplication of investment either in plant, or mains or services, and to enable the companies, through an intensive use of their properties, the centralization of certain services, the joint use of facilities, the extending of gas facilities owned by one gas company for use by another gas company, the purchase of materials and supplies in large quantities, the standardization of methods, and the interchange of information as to improvements and developments in the art, etc., to effect economies in operating costs, property investments, and carrying charges (R. 76-77; 1090-1091). Out of this coordination of the facilities and operations of the companies, grew a reasonable system of inter-company charges therefor (R. 1090-1095), more fully described under Point Fifteen.

Other economies are secured and better service brought about, through common supervision of certain activities, common purchasing of certain materials, and the like, for the system as a whole. The fair and reasonable basis of these inter-company charges for services, etc., is explained under Point Sixteen, *post*.

Scope of the issues and proofs as to the cost of the production and distribution of the gas sold by the appellee

In stating the operating expenses of a gas utility which buys a part of its required volume of gas from other companies, paying them therefor the production cost of such gas, a proportionate part of the taxes, insurance, repairs,

renewals and replacements, etc., incurred in connection with the manufacture of such gas, and a return at eight per cent. upon the property used in manufacturing such gas and transmitting it to the district of the purchasing company, it is obvious that such statements of the cost of gas may be made in either of two ways, without changing the facts or the consequences:

(1) *The cost per books*, of all of the gas sold by the purchasing company, under which basis all of the sums paid by that company for the use of others' property will appear in its operating expenses, as a part of what it paid out for the total quantity of gas it sells to its patrons, even though such sums represent to the owning company a return on its property; in which event the "rate base" of the purchasing company will be confined to its own used and useful property; or

(2) *The actual cost of production and distribution as though the purchasing company owned all of the plant capacity devoted to its use*, under which basis the statement of *cost* would exclude any return on others' property but would show only the actual outlays for labor, materials, taxes, etc.; in which event all of the property used in manufacturing, transmitting and distributing the gas sold to the public by the purchasing Company is shown in the "rate base."

The appellee proved its operating costs and its "rate base" in *each* of the two ways above stated (see list of principal exhibits, on pages 31 to 33, *post*), and urged that its own actual expenditures and necessary costs should control and ought to be found. The *Teele* exhibits show

the operating costs on the basis of (1) above; the *Nickerson* exhibits bring together, in form (2) above, the operating costs and property values proved by the other witnesses.

Basis of Master's findings as to operating costs

In stating appellee's operating expenses, the Master (and the District Court) adhered to the *second* method outlined above, which had been urged upon them by the defendant public authorities. The Master accordingly found the cost to the appellee of the production and distribution of the total quantity of gas required to meet the demands of the appellee's consumers, without regard to the fact that such gas may have been made at the appellee's own plants or purchased in part from the affiliated gas companies. He included in the several items of the appellee's operating expenses only such elements of actual cost of labor, materials and expense, as would have been included in the respective items if all of the gas reasonably required by the appellee to supply the demands of the consumers were manufactured at its own plants, striking out therefrom all sums actually paid to other companies for return on their property used by the appellee in the service of its consumers (R. 125, 179).

The Master stated that he preferred to test the statute under review by determining the rate of return permitted to the appellee upon the total property reasonably and actually devoted to its use, over and above the operating costs of labor, materials, etc., after excluding therefrom all sums paid as interest or return on property owned by other companies (R. 174). The various findings of the Master are accordingly on that basis, with the exception of his Findings Nos. 111 and 112 (R. 207-208), in which he showed the

results of the enforcement of the statutory rate upon the earnings and property of the appellee alone, on basis (1) above (R. 149-216).

Reasonable operating expenses uncontroverted in the testimony

Neither the appellant nor any other defendant below offered any *testimony* to challenge the actuality, correctness or reasonableness of any of the expenditures which were actually made by the appellee or by its affiliated companies entering into the appellee's actual operating costs (R. 121). No witness presented either opinion or evidence to attack the reasonableness or propriety of the actual outlays, or basis for disallowing any of them (R. 121).

On the trial, the defendants made virtually no pretext of *proving* that the actual results of operation would not have been confiscatory under the dollar rate and 650 minimum B.t.u. standard, during the period litigated and thereafter.

Mr. A. S. B. Little, the appellant Attorney-General's gas engineer, testified specifically that he made a study and analysis of the prices paid by the appellee for materials during 1922 and 1923, and that he had found no extravagance or waste arising from those prices (R. 1912).

The Master's drastic eliminations from the actual outlays

From the appellee's *actual and indisputable operating expenses,* the learned Master eliminated, for the purposes of this case, no less than $3,668,838.83 for 1922 and $2,732,779.31 for 1923, as shown in his opinion at R. 123, 124. Of these eliminated items, the appellee contests the propriety of the Special Master's elimination of each of those shown

in its exception numbered (1), printed at R. 217. These contested eliminations totalled $513,196.90 for 1923 and $1,275,768.60 for 1922, and their details are given and discussed under Point Twenty-three hereof, *post*.

Although the appellant says (Brief, page 1) that the decision below sustained all of the appellee's contentions, the fact is that the Master decided against the appellee, and eliminated, every item possibly open to controversy and contest (see Opinion, R. 123), and then, as Judge Winslow said (R. 319-320), proceeded to test the $1.00 rate by comparison with operating expenses thus reduced to the lowest terms.

Commenting upon such eliminations, for which the Special Master reproached himself as being "unduly exacting" (R. 124), Judge Winslow said (R. 319-320):

> "In arriving at the several bases upon which the rate of return may be computed, the Master has resolved very many questions against the plaintiff, which the Court deems should have been resolved in its favor. In determining operating expenses, items open to controversy are eliminated and operating expense is reduced to its lowest terms. It would have been proper, for illustration, to include the cost of constantly recurring rate litigation in the year when incurred, instead of eliminating those expenses altogether. But in view of the Court's conclusion that the Act is unconstitutional, confiscatory and void, even with these debatable items decided by the Master against the plaintiff, it is not necessary for this Court to pass on these specific matters."

Amounts found by Master for operating costs

On the above-described bases, the Master found (Findings Nos. 64 and 65) that the net actual and reasonable

cost of the gas delivered to its consumers by the appellee during the years 1922 and 1923 and as of May 1, 1924 (which was the latest date to which such costs were shown), *after eliminating therefrom the various substantial items of actual operating expenses* excluded by him for the purposes of this suit, and exclusive of any return upon investment or property owned by the appellee or upon investment or property of other companies devoted to the appellee's use, was, in cents per thousand cubic feet of gas *sold* (R. 181, 184-185). He also found (R. 184-185) the additional cost of furnishing gas of the statutory standard, which cost is included below:

(cents per thousand cubic feet of gas sold)

	Year 1922	Year 1923	As of May 1, 1924
Cost of production	54.79	50.29	48.45
Cost of distribution, etc.	30.39	27.61	27.61
Taxes	9.09	10.02	10.02
Retirement expense	3.50	3.50	3.50
Total reasonable cost	97.77	91.42	89.58
Less miscellaneous operating revenue	9.31	8.48	8.48
Net reasonable cost of gas of the quality actually supplied	88.46	82.94	81.10
Additional cost of gas of not less than 650 B.t.u.	3.15	5.19	5.02
Net reasonable cost of gas of not less than 650 B.t.u.	91.61	88.13	86.12

Production costs were higher in 1922 than later, because the 22-candle power standard was in effect until October of that year (R. 38, 48), when the companies began the change to a 537 B.t.u. standard. It will be noted that, after the Master's drastic eliminations from the appellee's actual operating expenses, the enforcement of Chapter 899 of the Laws of 1923 would have left the appellee with the following net operating revenues, per thousand cubic feet of gas sold, toward defraying a return upon the property used in the service of its consumers: No more than 8.25

cents in 1922; 11.73 cents in 1923; and 13.74 cents as of May 1, 1924 (R. 203-206).

At eight per cent., these unit sums would have amounted to a return upon a "rate base" of only $1.03 per thousand cubic feet of gas sold, in 1922; upon only $1.47, in 1923; and upon only $1.72, as of May 1, 1924. The appellant does not suggest that the appellee's "rate base" should be less than $3.50. After drastic reductions from the amounts shown by undisputed testimony, the Master's valuation amounts to a unit present value of $5.57. On this basis, the $1.00 rate would have yielded a return of only 2.1 per cent. for 1923 (R. 205).

Cost of gas sold by all system companies

The Master felt that the question whether any inter-company charges or payments for the use of others' property were being employed as a means of burdening unduly the appellee's expenses or "rate base," could best be tested by comparing the appellee's costs with those for all the system companies treated as though they were a single company. The record shows how closely the appellee's costs parallel those of the system companies combined in a single statement. The Master found that the net actual cost of the gas of the quality supplied to their consumers by the companies forming the so-called transfer-of-gas system (viz., the appellee, The Astoria Company, The New Amsterdam Company, The East River Company, The Central Union Company, The Northern Union Company, The Standard Company, and during the period prior to August 31, 1922, The Mutual Company), after eliminating the same contested items above mentioned as eliminated from the appellee's own operating expenses and *excluding therefrom also all inter-company charges and all return upon property*

or investment actually paid by one company to another for the use of property and/or facilities, for the years 1922, 1923 and as of the time of the trial, was as follows (Findings Nos. 67 and 68; R. 183-184). To this is added the additional cost of gas of the statutory standard of not less than 650 B.t.u.:

(cents per thousand cubic feet of gas sold)

	Year 1922	Year 1923	As of May 1, 1924
Cost of production	54.08	50.22	48.35
Cost of distribution, etc.	29.47	27.77	27.77
Taxes	8.85	10.53	10.53
Retirement expense	3.50	3.50	3.50
Total cost	95.90	92.02	90.15
Less miscellaneous operating revenue	10.01	9.39	9.39
Net reasonable cost of gas of the quality actually supplied	85.89	82.63	80.76
Additional cost of gas of not less than 650 B.t.u.	3.15	5.19	5.02
Net reasonable cost of gas of not less than 650 B.t.u.	89.04	87.82	85.78

The net return of the system companies, with all intercompany charges out and various eliminations made by the Special Master, would thus have been 10.82 cents for 1922; 12.04 cents for 1923, and 14.08 cents as of May 1, 1924. At eight per cent., this would have meant a return on a unit "rate base" of no more than $1.35 per thousand cubic feet of gas sold, in 1922; $1.51 in 1923, and $1.76 as of May 1, 1924, whereas the unit present value of the appellee's property is $5.57 and the appellant does not contend for a unit figure below $3.60.

Increased cost of 650 B.t.u. gas

The manufacture and distribution by the appellee of gas of a thermal content of not less than 650 British ther-

mal units as prescribed by Chapter 899 of the Laws of 1923, during the year 1922, would have cost at least 3.15 cents per thousand cubic feet of gas sold (R. 125, 203, 1124-1129), and during the year 1923, at least 5.19 cents per thousand cubic feet of gas sold, more than the cost of production and distribution of the gas actually made and supplied by the appellee to its consumers during those years respectively (R. 126, 204, 205, 1124-1129). See, for fuller details, Point Four, *post.*

The Special Master's action as to the amount and present value of the property used in serving the appellee's customers

With respect to the amount and present value of the property used in serving those who depend on the appellee for gas supply, the learned Special Master was even more drastic than he had been as to operating costs. The facts offer an interesting comment on the appellant's assertions that the Master sustained all the appellee's contentions (Brief, page 1).

The proofs in the present case as to the *reproduction value* of the amount of property used and useful in serving the appellee's consumers, as of June 1, 1923, showed a total of $216,153,025.31. Only as to the market value of the *land,* and the reproduction cost of the Astoria tunnel (a portion of which is used in serving the appellee's consumers) and *possibly* also as to the usefulness of the appellee's 14th and 42nd Street plants, did the defendants tender any conflict of *testimony,* and all of these, as shown under Point Five, *post,* could not have reduced the above-stated sum more than $10,024,996.

Nevertheless, the $216,153,025.31 of reproduction value thus clearly proved by the appellee was cut to $162,559,692.48 by the Special Master in reaching and finding *his reproduction value*—a reduction of $53,593,332.83, with substantially no evidence warranting a reduction at all.

Nor was this all: Having cut from $216,153,025.31 to $162,559,692.48 the "*reproduction value,*" the Special Master did not find *even this sum* as the "rate base" for the purpose of testing the rate. On the contrary, his "present value" of $134,101,738.77 was and is $28,457,953.71 less than *his* "reproduction value" and $82,051,286.54 less than the *actual reproduction value* proved by the appellee and in no way disputed by the defendants' proofs except to the very limited extent above shown.

Reproduction cost of property owned by the appellee and devoted to the service of its consumers as of June 1, 1923

Under the Master's basis of stating the operating expenses, he had to find the amount and value of all of the property owned and used in the service of the appellee's consumers, even though not owned by the appellee. The cost to reproduce the manufacturing plant, distribution system and other tangible property *owned by the appellee* and used and useful in its gas business as of June 1, 1923, inclusive of working capital and going value, was found by the Special Master to be, as of June 1, 1923, at least the sum of $122,898,715.11 (Finding No. 76; R. 188), of which the details are shown in the next table.

Reproduction cost of all the property used by the appellee in its gas business, as of June 1, 1923

The Master found that the cost to reproduce the manufacturing plant, distribution system and other property used by the appellee in its gas business as of June 1, 1923, was at least the sum of $162,559,642.48 (Finding No. 80; R. 190), made up as follows:

	Master's Findings based on reproduction cost
Property of appellee:	
Land	$ 13,460,000.00
Buildings	8,849,297.20
Manufacturing plants and holders	11,340,432.56
Holder stations and miscellaneous locations	6,311,765.38
Street mains	27,450,000.00
Services	4,350,000.00
Meters, cocks, etc.	6,500,000.00
Gas appliances	5,750,000.00
General equipment, including office and stable equipment and scows	831,523.00
Tools and implements	202,363.00
Laboratory equipment	23,905.00
Reproduction cost new of appellee's gas property	$ 85,069,286.14
Less amount necessary to restore property to condition as if new	$ 531,292.50
	$ 84,537,993.64
Undistributed structural costs	21,323,397.90
Franchises and rights (212 U. S. 19)	7,781,000.00
Working capital	3,500,000.00
Going value	9,000,000.00
Total	$126,142,391.54
Less reproduction cost of appellee's property used by other companies	3,243,676.43
Reproduction cost of property owned by appellee and devoted to the service of its own Consumers as of June 1, 1923	$122,898,715.11
Property of The Astoria Company	31,041,333.66
Property of The East River Company	8,266,253.52
Property of The Standard Company	353,390.19
Total reproduction cost of property used by appellee as of June 1, 1923	$162,559,692.48

The reproduction costs proved and the present values found

In reaching these figures for the reproduction cost of the property used by the appellee as of June 1, 1923, the Special Master made drastic reductions from the amounts proved by the appellee, without contradiction except as to a small part of the total, as the reproduction cost of the corresponding items of property. The total reproduction cost claimed and proved by the appellee was $216,153,025.31 (Ex. No.

890, Schedule X, Table I; R. 2800; plus going value), of which the details are given on page 104, *post*.

Present value of appellee's own useful property

The Special Master having found the reproduction cost of the portion of the property *owned by the appellee* and used by it in its gas business as of June 1, 1923, amounted to $122,898,715.11, as against a proved reproduction cost of $168,644,197.83, the Special Master next found that the "*present value* of such property as of June 1, 1923," was at least the sum of $99,303,434.18 (Finding No. 98, R. 200), of which the details are given in the next table.

Present value of property used by appellee in its gas business as of June 1, 1923

Likewise, after finding the reproduction cost of all the property used by the appellee in its gas business as of June 1, 1923, was $162,559,692.48 (R. 190), as against a reproduction cost proved by the appellee in the sum of $216,153,025.31 (Ex. No. 890, Schedule X, Table 1; R. 2800; plus going value), the Special Master found the "present value" of such property to be at least the sum of $134,101,738.77 (Finding No. 102; R. 201-202), made up as follows:

	Master's findings of present value
Appellee's property:	
Land	$ 13,460,000.00
Buildings	8,000,000.00
Manufacturing plants and holder stations	16,000,000.00
Mains	27,000,000.00
Services	3,000,000.00
Meters and gas appliances	11,500,000.00
General equipment	831,523.00
Tools and implements	202,363.00
Laboratory equipment	23,905.00
Working capital	3,500,000.00
Franchises and rights (212 U. S. 19)	7,781,000.00
Undistributed structural costs as shown by books	2,248,319.61
Going value	9,000,000.00
Total present value of appellee's gas property, at least	$102,547,110.61
Less value of property used by other companies	3,243,676.43
Present value of property owned as of June 1, 1923, and used in appellee's gas business	$ 99,303,434.18
Property of The Astoria Company	28,426,877.06
Property of The East River Company	6,146,427.53
Property of The Standard Company	225,000.00
Present value of all property used by the appellee in its gas business, as of June 1, 1923	$134,101,738.77

The conservative bases of the Master's findings as to the amount and present value of the property used by the appellee, are demonstrated under Point Five, *post.*

Investment in properties used in appellee's gas business

The *original cost* of the manufacturing plant, distribution system and other tangible property actually used by the appellee in its gas business as of June 1, 1923, including the investment in its property so used and the investment of The Astoria Company, The Standard Company, and The East River Company, in the respective properties owned by those companies and devoted to the use of the appellee in the service of its consumers, was not litigated upon the trial but was found by the Master from the investment findings in the prior suit (Judgment Roll, *Consolidated Gas Co.* v. *Newton;* Ex. No. 885 A; R. 2726-92;

2787; see, also, Point One, *post*), as of December 31, 1918, plus net additions from that date to June 1, 1923, at actual cost. The adjudicated investment was thus found by the Master to amount to the sum of $98,891,803.63 (Finding No. 93; R. 198), the details being, by accounts, as follows (Exs. Nos. 820-831, 766; R. 2343-2382):

		Actual Investment
Appellee's property:		
Real estate	$14,597,479.43	
Less not claimed to be used in the gas business	3,791,930.95	$10,805,548.48
Manufacturing plants and holder stations	17,540,068.52	
Less not claimed to be used in the gas business	1,348,069.25	16,191,999.27
Street mains		13,531,095.10
Services		1,971,101.26
Meters		4,352,693.46
Cocks and connections		442,831.68
Furniture and fixtures		576,361.59
Horses, wagons and harness		11,252.16
Tools and implements		225,415.23
Scows		11,921.20
Gas appliances rented		3,506,632.75
Automobiles and accessories		232,840.87
Organization		290,939.64
Other intangible property		1,009,970.00
Total investment in appellee's physical property		$53,160,602.69
Less that portion of jointly used property used by other companies	$1,783,239.25	
Less one-third of Kingsbridge land	80,000.00	1,863,239.25
Total investment in physical property used in serving appellee's consumers		$51,297,363.44
Franchises and rights (212 U. S. 19)		7,781,000.00
Working capital		3,500,000.00
Going value		9,000,000.00
Total investment owned by the appellee and devoted to its gas business as of June 1, 1923		$71,578,363.44
Property of The Astoria Company		23,331,245.86
Property of The East River Company		3,795,038.34
Property of The Standard Company		187,155.99
Original cost of all the property used by the appellee in its gas business as of June 1, 1923		$98,891,803.63

The claims of the appellant as to the appellee's investment and "rate base" are discussed under Point Six, *post.*

Fundamental errors of appellant's brief

The appellant's brief seems to seek "atmosphere" rather than argument; it relies largely upon assertion of matters outside of this record and unrelated to the gas business in New York City.

In so far as appellant's brief tries to deal with this record, we are sorry to say, and to *prove,* that the brief does not state the facts reliably. Its principal contentions are based upon mis-statements and upon computations which disprove the appellant's claims when the mathematical and accounting errors are corrected. We shall refer to *many* instances of this, under the "points" of this brief.

The *fundamental* fallacy of the appellant's contentions is this:

> (1) That determination of the *amount and value of the property* reasonably required for the appellee's gas business should be predicated upon the unit investment in *water-gas* plants, which are less expensive to build than coal-gas plants; and
>
> (2) That determination of the *production cost* reasonably required for the appellee's gas business should be predicated upon the costs obtained in a *combined* coal-gas and water-gas plant of more expensive construction because of its coal-gas units.

Thus the appellant seeks to gain the benefit, in the cost of production, of the economies of *coal-gas* manufacture (R. 1858), and at the same time avoid the consequences of that

action, by making no provision in the "rate base" for the more expensive coal-gas property necessary for the accomplishment of the economies.

By reducing the appellee's "rate base" to a unit cost of a water-gas system (less than original cost, at that), and by reducing the appellee's actual 1923 production costs to a basis largely affected by the coal-gas units, the appellant procures a theoretical and hybrid figure, which could never be realized in actual practice and was repudiated even by his own engineering witness (R. 1879). From this starting-point, appellant makes further, and still less rational, reductions, until he finally is able to argue for the validity of the $1.00 rate, assuming, as he does, the sufficiency of a return of less than six per cent. upon less than original cost (Brief, pp. 109, 37).

Appellant makes no allowance for the 5.02 cents of admitted additional cost of gas of not less than 650 B.t.u., and makes no pretence that the $1.00 rate would be nonconfiscatory for gas of that calorific content.

LIST OF PRINCIPAL EXHIBITS

For possible convenience, the following list has been prepared to indicate compactly the *relatively few* exhibits which bring together and show concretely the facts most pertinent to the issues on this appeal. *A complete and descriptive* list of the 1154 exhibits offered before the Special Master is printed in Volume III of this record, at pages 1996 to 2138 (fols. 2996-3101). Wherever possible, this list correlates the present exhibits with the identic or corresponding exhibit in the 1921 action (*Newton v. Consolidated Gas Company*). Unfortunately, however, this *complete* list of the exhibits, as prepared by counsel and printed at R. 1996 to 2138, does not contain page or folio references to the record here before this Court, but only the references to the record before the Special Master. The page references however, as to exhibits printed in this record, are shown in the index to Volume I (iv-xii).

Out of the large number of exhibits, only the more salient ones have been printed in full in this record; but these comprise more than three volumes in this record.

As to operating expenses and revenues:

Ex. No.		*Printed in Record*	
		Vol.	*Page*
813	Details of cost of production and distribution of gas by appellee for year 1922 (Mr. Arthur W. Teele)	IV	2316–20
814	Details of taxes for year 1922 (Mr. Teele)	IV	2320–28
815	Summaries of purchased gas, use of manufacturing plant capacity, and use of distributing system, for year 1922 (Mr. Teele)	IV	2328 (side fols. 3324-27)

Ex. No.		Printed in Record Vol.	Page
816	Details of cost of production and distribution of gas by appellee for year 1923 (Mr. Teele).....	IV	2330–34
817	Details of taxes for year 1923 (Mr. Teele)	IV	2334–42
818	Summaries of purchased gas, use of manufacturing plant capacity, and use of distribution system, for year 1923 (Mr. Teele)	IV	2342 (side fols. 3347-50).
888	Detailed cost of the production and distribution of all the gas sold *by the appellee* during 1923, including cost of materials, labor, general expenses, insurance, maintenance, taxes, etc., paid in cost of gas purchased, and payments made for the use of the property owned by other gas companies and devoted to the service of Consolidated Gas Company consumers; with detailed statements showing the rates required to yield an 8 per cent. return upon the actual investment and upon the replacement value (Mr. Nickerson)	V	2800 (side fols. 4091-98)
889	Similar statement of the cost of gas sold *by the appellee*, for the year 1922 (Mr. Nickerson)	V	2800 (side fols. 4099-4106)

Ex. No.		*Printed in Record* *Vol.*	*Page*
891	Similar statement of the cost of the production and distribution of all the gas sold, during the year 1923, *by the system companies* of the Consolidated Gas Company system (Mr. Nickerson)	V	2800
	(side fols. 4129-39)		
892	Similar statement of the cost of gas sold *by the system companies,* for year 1922 (Mr. Nickerson)	V	2800
	(side fols. 4140-48)		
1017	Similar statement of the cost of production and distribution of gas sold *by the appellee* as of May 1, 1924 (Ex. No. 888 with current prices applied), showing rates required for adequacy of return upon actual investment and upon replacement cost, as of May 1, 1924 (Mr. Nickerson)	VI	2828
	(side fols. 4180-86)		
1018	Similar statement of the cost of production and distribution of gas sold *by the system gas companies,* as of May 1, 1924 (Ex. No. 891 with current prices applied) (Mr. Nickerson)	VI	2828
	(side fols. 4187-93)		

Ex. No.		*Printed in Record* *Vol.*	*Page*
895 896	Statements showing the rate of return which would have been earned by appellee upon its property in 1923, if $1.00 rate had been in effect (Mr. Nickson)	III	1637–40
897 898	Similar statements, as to return which would have been yielded by $1.00 rate in 1922	III	1641–44
1019	Chart of average actual rates of pay for all appellee's mechanical departments, January 1, 1913, to June 30, 1924 (Mr. Davidson)	VI	2828 (side fol. 4194)
1020	Index of actual prices paid by appellee for wrought iron pipe, black steel pipe, gray iron castings, etc., Jan. 1, 1922, to June 30, 1924 (charted by Mr. Davidson)	VI	2828 (side fol. 4195)
1021	Index of actual prices paid by appellee for building brick, checker brick, lumber, etc., Jan. 1, 1922, to June 30, 1924 (charted by Mr. Davidson) ...	VI	2828 (side fol. 4196)

Ex. No.		*Printed in Record* *Vol.*	*Page*
1022	Index of prices actually paid by appellee, from Jan. 1, 1922, and to be paid upon existing contracts to March 31, 1925, for anthracite broken coal, gas coal, gas oil, etc. (charted by Mr. Davidson)	VI	2828 (side fol. 4197)
1025	Detailed comparison of Astoria water-gas costs and Consolidated Gas Company water-gas costs, during 28-month period from Jan. 1, 1922, to April 30, 1924 (Mr. Woods)	VI	2828 (side fol. 4198)
1027	Comparison of actual production cost of all gas made, at Astoria and Consolidated Gas Company plants, during same period (Mr. Woods)	VI	2828 (side fol. 4200)
1035	Comparison of production costs, carrying charges, etc., between Astoria and Consolidated Gas Company plants during same period (Mr. Woods)	VI	2845–2849

As to the amount of the property and its present value:

Ex. No.		*Printed in Record Vol.*	*Page*
	(a) Property maps and diagrams		
260	Map showing general location of properties owned and used by appellee	IV	2314 (side fol. 3303)
258, 259, 261, 264, 265	Diagrams of the various parcels of land used and useful in the appellee's gas business	IV	2314 (side fols. 3282-3306)
832	Diagram of the appellee's "gas transfer" system	IV	2386 (side fol. 3445)
	(b) Reproduction cost of property		
268	Reproduction cost of the labor and materials necessary for laying the *mains* of appellee as of June 1, 1923 (Mr. C. C. Simpson's estimate)	IV	2314 (side fol. 3397)
	Detailed schedules supporting this appraisal	I	480 (side fols. 699-704)
270	Reproduction cost of labor and materials necessary for laying the *services* of the appellee as of June 1, 1923 (Mr. C. C. Simpson's estimate)	IV	2314 (side fol. 3308)

Ex. No.		*Printed in Record* *Vol.*	*Page*
854	Reproduction cost of labor and materials necessary for laying transfer mains owned by *appellee*	IV	2440
855	Reproduction cost of labor and materials necessary for laying transfer mains, *owned by other companies and used by appellee*	IV	2440
838	Stipulation by Attorney-General as to correctness of inventory, quantities, unit prices, total costs, etc., of appellee's *structures* as appraised by Mr. Henry R. Burt and as to used and useful character of such structures	IV	2402–04
	General summary of replacement costs of *structures* at works (Mr. Burt)	IV	2404 (side fols. 3462-58)
	Detailed replacement costs of structures at 14th and 42nd Street plants (Mr. Burt)	IV	2404 (side fols. 3469-3558)
838A	Similar stipulations by Attorney-General as to appellee's *structures* at stations and miscellaneous locations, as appraised by Mr. Burt	IV	2405–06
	General summaries of replacement costs of structures at stations, etc. (Mr. Burt)	IV	2406–15

Ex. No.		*Printed in Record* *Vol.*	*Page*
839	Detailed statement of the expenditures necessary to put the *structures* of the appellee in the condition in which they were when new, etc. (Mr. Burt)	IV	2416–33
856 856A	Stipulation of Attorney General as to correctness of the inventory, unit prices, etc., of the property used by the appellee in its gas business as of June 1, 1923, as appraised by Colonel A. S. Miller and others.....	IV	2441–42
	Summary of the value of the *appellee's* property, as so inventoried and appraised by Colonel Miller (using Mr. Huntley's figures for land)	IV	2444–45
	Similar summary of the value of *appellee's* property using Mr. F. K. Stevens' figures for land.	IV	2445–46
	Summary of Colonel Miller's inventory and appraisal, by stations	IV	2455–57
	Notes by Colonel Miller, explaining in detail his working capital and undistributed costs	IV	2446–55
	Details of Colonel Miller's inventory and appraisal of the 14th and 42nd Street plants (see R.		

Ex. No.		*Printed in Record* *Vol.*	*Page*
	2441-42 *ante*, of this brief, as to reasons for printing details only of these two plants).....	IV	2457–82
865	Expenditures necessary to restore the *appellee's* stations and holder stations to the condition in which they were when new (Colonel Miller)	V	2504–37
858	Similar stipulation by Attorney-General as to the correctness of Mr. Burt's inventories, unit prices, total replacement costs, etc., of the structures and appurtenances at the Astoria plant	IV	2483–84
	Summary of Mr. Burt's inventory and appraisal of *structures* of The Astoria Company	V	2485–91
859	Expenditures necessary to restore Astoria structures to the condition in which they were when new (Mr. Burt)	V	2492–98
866, 866X 866A 866AX	Stipulation by Attorney-General as to correctness of Colonel Miller's inventories, unit prices, total costs, etc., of property of The Astoria Company	V	2538–39

Ex. No.		*Printed in Record* *Vol.*	*Page*
	Summary of value of property of *The Astoria Company,* as appraised by Colonel Miller (Mr. Huntley's figures for land)....	V	2541–42
	Same summary (Mr. Stevens' figures for land)	V	2544–45
867	Expenditures necessary to restore Astoria works, machinery, etc., to the condition in which they were when new (Colonel Miller)	V	2556–2648
840	Similar stipulation by Attorney-General as to inventories and replacement costs of buildings owned by The Standard Company but used by appellee (as appraised by Mr. Burt).....	IV	2434–35
	Summary of Mr. Burt's appraisal of 63rd Street Station of *Standard Company*	IV	2435
842	Estimate of cost to restore buildings of the Standard Co. shown in Exhibit No. 840 to the condition in which they were when new (Mr. Burt)	IV	2439
841	Similar stipulation by Attorney-General as to inventories and replacement costs of buildings owned by The East River Company but used by appellee.....	IV	2436–38

Ex. No.		*Printed in Record* *Vol.*	*Page*
	Summary of Mr. Burt's appraisal tunnel head houses of the Astoria and Ravenswood Tunnels owned by The East River Co.	IV	2437–38
843	Estimate of cost to restore tunnel head structures shown in Exhibit No. 841 to the condition in which they were when new (Mr. (Burt)	IV	2439–40
836	Replacement cost of Astoria Tunnel as of June 1, 1923 (detailed estimate by Mr. J. Vipond Davies)	IV	2396–98
837	Replacement cost of the Ravenswood Tunnel as of June 1, 1923 (detailed estimate by Mr. J. Vipond Davies)	IV	2399–2402
868X, 869X, 871 872	Summaries of the values of certain jointly used properties ...	V	2644, 2661, 2687
873X 874X	Summaries of the values of property used by the *appellee* in its gas business as of June 1, 1923	V	2694
875 876	Statement showing buildings appraised by Burt but not included by Miller	V	2696

Ex. No.		*Printed in Record* *Vol.*	*Page*
877 878	Statements showing value of land appraised by Messrs. Stevens and Huntley, not included in Miller inventory and appraisal	V	2698–2700
890	Detailed statements of the replacement cost, as of June 1, 1923, *summarizing all of the foregoing exhibits,* and setting forth the replacement cost of all the property devoted to the service of the appellee's consumers (Mr. Nickerson)	V	2800 (side fols. 4106A-4128)
893	Reference data prepared for Mr. W. R. Addicks in connection with his study and estimate of the appellee's going value (Mr. H. C. Davidson).....	VI	2801–18
	(c) As to working capital		
826	Actual working capital used by the appellee in its gas business during 1923 (Mr. Brundage)..	IV	2351
827	Same for year 1922 (Mr. Brundage)	IV	2352
830	Actual working capital of The Astoria Company, used in the gas business of the appellee, during 1922 and 1923 (Mr. Brundage)	IV	2379–81

Ex. No.		*Printed in Record* *Vol.*	*Page*
	(d) As to original cost of property		
828	*Summary* of the *original cost* of the property owned by the *appellee* and used in its gas business, as of various dates, exclusive of going value, etc. (Mr. Brundage)	IV	2352–55
820 to 825 (incl.)	Detailed schedules supporting above summary (Mr. Brundage)	IV	2343–50 (side fols. 3351-3405)
829	Summary and detailed schedules showing the original cost of the property owned by *The Astoria Company,* used in the gas business as of various dates (Mr. Brundage)	IV	2356–79
831	*Summary* of the *original cost* of the property *used by the appellee* in its gas business (including property owned by affiliated companies but used by the appellee), as of various dates, exclusive of going value, etc. (Mr. Brundage)	IV	2382–87

As to other pertinent matters:

Ex. No.		*Printed in Record* *Vol.*	*Page*
766	Basis of distributing between appellee and other system gas companies the carrying charges, etc., on such properties as are jointly used during the year 1923 (Mr. Woods).....	II	1112 (side folios 1681-1720)
765	Similar statement as to 1922....	II	1111–1112 (side folios 1648-1681)
833	Forecast of the appellee's requirements of manufacturing plant capacity, for the years indicated, based on experience (Mr. George E. Woods)	IV	2388–91 (side fols. 3446-49)
834	Same forecast for all system companies on "transfer system"..	IV	2391–95 (side fols. 3450-53)
212	Report of Public Service Commission as to desirability of 537 B. t. u. gas (Case No. 108)....	IV	2217–19
216	Consolidated Gas Company's acceptance of Commission's order of August 30, 1922, fixing a $1.15 rate for gas for at least one year, on specified conditions	IV	2300–01
835	Maximum day's send-out of gas, in recent years.....	IV	2395

Ex. No.		*Printed in Record* *Vol.*	*Page*
885A	Judgment-roll in prior action of *Consolidated Gas Company* v. *Newton as Attorney-General* decided by this Court on March 6, 1922 (258 U. S. 165; affg. 267 Fed. 231; 274 Fed. 986).....	V	2726–92

Schedules, summaries and studies spread on record

In addition to the above-listed schedules which are printed as *exhibits*, the record contains a number of important tabulations and studies which were spread at length upon the record, as a compact form of the direct testimony of the witnesses who prepared them. The more important of these tabulations (which were not given exhibit numbers) are the following:

	Printed in Record *Vol.*	*Page*
Tables summarizing the value of the various parcels of land (unimproved) used by appellee as of June 1, 1923:		
As appraised by Mr. Francis K. Stevens	I	583–84
As appraised by Mr. Robert Huntley....	II	917–20
Cost to appellee of inspecting and adjusting its appliances on consumers' premises, to comply with Commission's order of August 30, 1922 (Case No. 108) for 537 B. t. u. standard (Mr. Brundage)	I	774–76
Number of men, working days, etc., required for these adjustments (Mr. Rasch)	II	909–10

	Printed in Record Vol.	Page
Number of appellee's employees, by departments, in 1922 and 1923 (Mr. Brundage)	I	777–78
Amount charged annually against reserve for renewals and replacements 1905-23 (Mr. Brundage)	II	817–18
Computation of the *increased cost* to the appellee of manufacturing and delivering gas of not less than 650 B. t. u. (Mr. Woods)	II	1124–29
Study and estimate of the going value of the appellee as of June 1, 1923, and subsequent dates (as estimated by Mr. Woods)	III	1551–61
Study and estimate of the going value of the appellee as of June 1, 1923, and subsequent dates (as estimated by Mr. Walter R. Addicks)	III	1593–1632
Data used by Mr. Addicks in his study of going value	III	1686–90

POINT ONE

TREND OF WAGES AND PRICES SINCE 1922 DECISION OF THIS COURT (258 U. S. 165); PRESENT AND PRIOR FINDINGS OF APPELLEE'S COST COMPARED

The natural starting-point for the consideration of this case is the findings which were affirmed by this Court in 1922, in the prior suit of this appellee (258 U. S. 165). Members of this Court may be interested in seeing how the present findings compare with those passed upon in the prior suit, so that their differences may be tested by the trend of wages and prices since that time. Such a comparison may also furnish an index of the reasonableness of the present contentions of the appellant.

Findings as to unit operating costs compared

After various eliminations which he made for the purposes of the prior suit, Special Master Gilbert found that the appellee's actual and reasonable operating expenses were 75.18 cents per thousand cubic feet of gas sold (Ex. No. 885A; R. 2726-92; Judgment roll and report). In the illustrative computations which he made for the purpose of seeing whether the rate could *possibly* be upheld, Judge Hand put the appellee's 1919 cost at 68.22 cents, with many items drastically and unfairly thrown out, as he stated, and with a frank warning against the use of such assumptions by anyone else (see Point Fourteen, *post*). On the other hand, in making up the limitation which he placed on the rate until the Commission fixed a new rate, he allowed the appellee a reasonable operating cost of 87.57 cents. The Special Master's figures in the prior suit represented an effort to find the actual and reasonable operating costs and

conditions as of 1919, and may best be used for comparative purposes.

The following table compares the prior and present findings of operating cost:

(cents per thousand cubic feet of gas sold)

	Appellee's costs as allowed by Master in prior case as of Sept., 1919	Allowed by Master in present case		
		Appellee year 1923	Appellee May 1, 1924	System Gas May 1, 19
Cost of production	50.63	50.29	48.45	48.35
	(a) 1.00	(b) 5.19	(b) 5.02	(b) 5.02
Cost of distribution	20.00	27.61	27.61	27.77
Retirement expense	3.00	3.50	3.50	3.50
Taxes	7.50	10.02	10.02	10.53
Total operating cost	82.13	96.61	94.60	95.17
Miscellaneous operating revenue	6.95	8.48	8.48	9.39
Net operating expenses	75.18	88.13	86.12	85.78
Gas sales at statutory rates	79.91	99.86	99.86	99.86
Net operating income	4.73	11.73	13.74	(c) 14.08

(a) Maintenance of Astoria tunnel.
(b) Additional cost of supplying gas of statutory calorific content.
(c) After giving effect to additional cost of supplying gas of statutory calorific content.

Appellant contends (Brief, page 38) that the appellee's operating expenses "should not be allowed at a sum greater than 75.73 cents per thousand cubic feet sold"; in other words, that the *present* operating costs should be only 55/100ths of one cent higher than the cost found by the Special Master in 1919.

Present and prior findings as to investment compared

In the prior suit, the investment in all of the property then adjudicated to be used and useful in the service of the appellee's consumers, as of December 31, 1918, was found to be at least $74,854,351.14 (Ex. No. 885A; R. 2726-92; Judgment-roll and report; Finding No. 70). The book investment in the property then used and useful in the appel-

lee's gas business was litigated thoroughly in that action, and was one of its principal issues. The book investment was proved and found to be not in excess of the actual and reasonable original cost of such property.

On the trial of the present action, the judgment-roll and findings from the prior suit were received in evidence Ex. No. 885A). Mr. Henry M. Brundage, then secretary (now vice-president) of the appellee, testified at length (R. 1035-1047) as to his preparation of the detailed investment schedules, year by year since 1884, which had been the basis for the findings in the prior suit and which were therefore his starting-point for his schedules for the present suit. He added the additions and withdrawals for the five-year period subsequent to December 31, 1918, to the schedules which he had prepared in the prior suit (Exhibits 471-476, and 496 in that case), changing only the schedules relating to property not used, to conform to the existing conditions in 1923. These supplemented schedules were received in evidence as Exhibits Nos. 820 to 825, inclusive (R. 1032-1047, 2343-2348).

As to the property of The Astoria Company, Mr. Brundage likewise carried down that company's investment from the book figures as of December 31, 1918, as shown by the witness Sangster for the defendants in that case. The investment in the property of The Astoria Company is in evidence as Exhibit No. 829 (R. 1049-1052).

The accountant for the appellant (Mr. Mark Wolff), an employee of the City of New York (R. 1785), also prepared exhibits, showing with substantial correctness the net additions to the property of the appellee and The Astoria Company since December 31, 1918 (Exs. Nos. 54-57, 74-77; R. 2980-2986, 3015-3020). These exhibits show net additions somewhat in excess of the sums proven by

the appellee, the reason being that Mr. Wolff did not attempt to segregate the portion of the property not devoted to the appellee's consumers. Neither Mr. Wolf nor anyone else for either defendant attempted to review or to controvert the investment as of December 31, 1918, as determined in the prior suit.

There was thus no controversy on the trial as to the amount of the actual investment, either before or after December 31, 1918. Nor were there any new issues raised which had not been urged and passed upon by the Court in the prior suit.

The following tabulation sets forth the investment in property used by the appellee as of June 1, 1923, by accounts, in comparison with the investment found in the prior case as of December 31, 1918:

	June 1, 1923	December 31, 1918	Variation
Tangible property (Real estate, plant, mains, services, meters and miscellaneous)	$58,300,602.89	$46,401,025.49	$11,899,577.40
Less property not claimed and portion of jointly used property used by other companies	7,003,239.45	7,725,631.50	*722,392.05*
Investment in tangible property owned by appellee and used in its gas business	$51,297,363.44	$38,675,393.99	$12,621,969.45
Working Capital:			
Appellee	3,500,000.00	3,800,000.00	*300,000.00*
The Astoria Company	2,402,232.57	1,926,709.00	475,523.57
Franchises and rights (212 U. S. 19)	7,781,000.00	7,781,000.00	.....
Going value	9,000,000.00	.....	9,000,000.00
Tangible property of other companies used by appellee:			
The Astoria Company	20,929,013.29	17,492,633.57	3,436,379.72
The East River Company	3,795,038.34	5,178,614.58	*1,383,576.24*
The Standard Company	187,155.99	.....	187,155.99
	$98,891,803.63	$74,854,351.14	$24,037,452.49

Of the *net* increase of $12,621,969.45 above shown, in the gas property owned *by the appellee,* $10,010,630 represents the acquisition by it of the gas property of The

Mutual Company, which property did not appear in the findings of investment in property used by the appellee as of December 31, 1918. The sum paid for that property by the appellee, however, was based upon the amount found as of October 1, 1919, in that company's rate suit and confirmed by this Court.

In a number of respects, the present Master's findings of the net increase in the investment in property, used for the appellee's consumers are on a most conservative basis, as compared with those of the prior Master and Court. In the prior determination, for example, the entire investment in the Astoria tunnel, amounting to $5,178,614.58, was charged to the use of the appellee's consumers. In the present case, the Master charged the appellee's consumers with only the proportion of the investment in the tunnel properties which they actually use (viz., 56.44 per cent.; R. 1112), which reduced by $1,383,576.24 the amount charged against the appellee's consumers but not the total tunnel investment found as of December 31, 1918, or the net additions to that property since that date.

Again, the 1918 findings charged against the appellee's consumers the total Astoria plant investment ($15,242,633.57) plus $2,250,000 for part of a new water-gas unit under construction at Astoria but not yet completed, making $17,492,633.57. Since December 31, 1918, the $8,644,319.59 of net additions have brought the total Astoria gas investment to $26,136,933.16, but the present Master and Court charged the appellee's consumers with the use of only 80 per cent. of the Astoria plant, or only $20,929,013.29, exclusive of working capital (Ex. No. 829; R. 2356).

No item of the 1918 investment or the net additions was challenged on the trial, except the usefulness of the 14th and 42nd Street plants, which had been included in the

Commission "rate base" in August, 1922 (R. 42-43). In what seemed to us an excess of conservatism, the Special Master and District Court disallowed, from the appellee's actual investment to June 1, 1923, the sum of $80,000 as part of the cost of land at the Kingsbridge holder station. He also disallowed a larger part of the actual expenditure of the appellee, subsequently to June 1, 1923, for the purchase of land at the Hunts Point Station, allowing but $500,000 of the actual cost of $2,265,103.

The investment as of June 1, 1923, in property used and useful in the appellee's gas business, was accordingly found by the Special Master and District Court to be $83,989,571.06 (Exs. Nos. 831, 766; R. 2382, 1112) exclusive of any allowance for investment in working capital or going value.

Nevertheless, the appellant contends that such investment should not have exceeded $59,640,565 (Brief, page 36), exclusive of any allowance for working capital or for going value.

In other words, appellant argues for a present investment finding actually $9,487,077.14 less than this Court approved for fixed capital as of December 31, 1918, and would give no effect whatever to $14,861,928.92 of actual net additions to plant and property since that date.

Present and prior valuation compared

Because the appellee had no injunction *pendente lite* in its prior suit and was in dire need of exigent relief, the appellee asked and obtained findings based on the amount of its investment, as a *minimum* (267 Fed. 231, 268; 258 U. S. 165).

From all of the evidence, Judge Hand pointed out (page 268) that

> "It is more than probable that the plaintiff's whole investment is therefore properly valued at $130,000,000, at present prices."

Since the date of Judge Hand's determination, the net additions to the property have been $14,861,928.92 (Exs. Nos. 820-825, 828), exclusive of additions to working capital, which would make the value as of June 1, 1923, at least $144,861,928.92, exclusive of going value and additions to working capital, and aside from giving effect to the increases in wages, prices and construction costs since 1918, as hereinafter shown.

Judge Hand's total figure of present value would thus become at least $154,037,452.49 at June 1, 1923; the Special Master and District Court fixed a present value of only $134,101,738.77 (R. 202), both figures being on the bases above stated.

The appellant contends (Brief, pages 84), that the present value of the same property should not exceed $84,000,000 and "should probably be fixed at a much lower figure."

Present findings follow logically from those previously affirmed

The findings of the present Master and District Court, as to the amount of the operating costs and the present value of the property, are consistent and in full accord with the sums shown in the findings before this Court in 1922, taking into account the changes which have taken place, in the rates of pay of labor and the prices of materials, since the prior suit.

The slight increases in operating costs since 1919, shown in the comparative table on page 48, *ante*, are fully explained by what has taken place. *Taxes* alone were 7.5 cents in 1919 and 10.02 cents in 1923 and 1924 (R. 181).

Appellee cannot control the cost of taxes. *Repairs* cost 8.62 cents in 1919 and 10.53 cents in 1923. (Ex. Nos. 816, 888, 891.) Distribution expenses were 20 cents in 1919 and 27.61 cents in 1923 and 1924 (R. 181; Ex. Nos. 888, 1017).

The reasons for increases since 1919 are not hard to find. The average actual rates of pay for *all* of the appellee's mechanical departments were 44.85 cents per hour in 1919, 57.85 cents in 1923, and 58.84 cents in 1924 (Ex. No. 1019; R. 2819; side fol. 4194). Today they are more than 65 cents. Gas oil cost 6.80 cents per gallon in 1919 (Ex. No. 486 in prior case); the price paid was 5.52 cents per gallon in 1923 (Ex. No. 888). The price paid for gas coal was $5.715 per ton in 1919 (see prior exhibit No. 486); $7.47 per ton in 1923. Generator coal cost $6.713 in 1919 (see same Exhibit); $10.69 per ton in 1923 (Ex. No. 1017). Labor, oil and coal are the three principal elements in the cost of gas.

The above figures hardly sustain appellant's claim that the Master should have found a present operating cost only 55/100ths of one cent higher than the unit cost adjudicated for 1919.

Likewise as to present value: If $130,000,000 was a reasonable valuation in 1920, as Judge Hand said, and $14,861,928.92 of net additions to fixed capital have since been installed, to which must be added going value and the additions to working capital making a total of $24,037,452.49 on that basis, then surely the present Special Master's finding of $134,101,738.77 is too low rather than high, and the appellant's claim of less than $84,000,000 is absurd.

In fact, the present record shows clearly that "construction costs, conditions, wages, and prices affecting value" as well as affecting operating costs, have substantially increased since 1919.

Rates of pay of labor

Exhibit No. 1019 (R. 2829; side fol. 4194) shows the average actual rates of pay of labor in all of the mechanical departments of the appellee, from January 1, 1913, to June 30, 1924. The direct testimony as to this exhibit was given at pages 7610-7614 of the printed record. The cross-examination took place at pages 7622-7637.

The facts in relation to the rates of pay of labor, in all of the mechanical departments of the gas business, are given in cents per hour, and then are graphically shown by index numbers. *Giving to the average rate per hour as of January 1, 1913, the index figure of 100,* the subsequent index figures are as follows:

Jan. 1st	Index No.
1913	100
1914	105
1915	106
1916	112
1917	125
1918	144
1919	163
1920	200
1921	211
1922	208
1923	211
1924	214

In cents per hour, the average rate of pay in all mechanical departments increased from 27.44 cents in 1913, to 34.34 cents in 1917, 44.85 cents in 1919, 57.87 cents in 1921, and 58.88 cents in 1924. Present average rates exceed 65 cents.

The slight recession which started late in 1921 and influenced 1922, resulting from the readjustment of labor

incident to the period of business depression, was soon ended, and the 1923 figure equals, and the 1924 figure exceeds, the highest previous year. The increase from 1919 to 1924 is 31 per cent.

There is nothing speculative, conjectural or remote about these increases and these costs. They reflect only the sums of money which actually go out, week by week, to the employees in the various mechanical departments.

The prices of materials

Exhibit No. 1020 (R. 2828, side folio 4195), for the appellee, shows the relative cost of wrought-iron pipe, steel pipe, and gray iron castings, to this company. The direct testimony of Mr. Davidson as to this exhibit will be found at R. 1947-1949. *As to each of these materials, the charts show substantial and unvarying increases in the prices paid, during 1922, 1923 and 1924.*

Exhibit No. 1021 (R. 2828, side folio 4196), for the appellee, similarly shows the prices actually paid by the appellee for common building brick, checker brick, and rough spruce lumber. These are of course materials which enter largely into works repairs, and so, into operating costs, as well as into construction costs. As to these three materials, Exhibit No. 1021 shows that they experienced changes in price, upward and downward, during the period litigated; but that the *trend* was upward, so that the price of *each*, at the time of closing testimony, was actually higher than at the beginning of 1922.

Exhibit No. 1022 (R. 2828, side folio 4197) also prepared by Mr. Davidson from the vouchers actually paid by the appellee, relates to generator (anthracite broken) coal,

gas coal, and gas oil, to the end of existing contracts in 1925. These three materials relate, of course, solely to the appellee's manufacturing costs, and the prices are shown under contracts to April 1, 1925.

As to *generator coal,* used in water-gas manufacture, the prices paid by the appellee did not vary greatly from 1922 to the present time. The advance in price, under the present (1924-1925) contracts, is very slight, as compared with the price in early 1922. The price of anthracite generator coal as of May 1, 1924, was $10.69 per gross ton (Ex. No. 1017; R. 2828), in comparison with $8.86 2/3 per ton as of October, 1919, the price on which the findings in the prior suit were based (Finding No. 23; Ex. No. 885A; Judgment Roll and Report *Consolidated Gas Co.* v. *Newton;* No. 257; October Term, 1921).

As to *gas coal* (bituminous) used in coal-gas manufacture, the 1924-25 price is lower than the peak 1922 price during the 1922 coal strike, but 68 cents a ton higher than at October, 1919.

As to *gas oil,* the January, 1922, index numbers were slightly above 180, as compared with 100 on January 1, 1913. The oil price receded at the end of the first quarter in 1922, and went still lower early in 1924. Since early 1924 the price trend for the contract year to April 1, 1925, has been upward. The price for the first quarter of 1925 was shown to exceed slightly the 1924 price (R. 2828).

Mr. Little's testimony and exhibits

As to oil, coal, etc., the Attorney-General's Exhibit No. 95 assumed no decrease in unit costs to the appellee, at least during the period covered by Mr. Little, viz., to April 30, 1925. The only exhibit offered in behalf of either defendant in relation to operating costs, by any witness who

knew anything about the costs of making and distributing gas, was Mr. Little's Exhibit No. 95. Mr. Little said he looked for some recession in the cost of construction materials, but not in operating materials or costs (R. 1910).

Mr. Little admitted frankly (R. 1910) that he did not think there could be any substantial decline in the costs of construction or operating materials until the rates of pay of labor have markedly declined, which decline he saw no reason to expect in near prospect (R. 1910).

The appellee's illustrative exhibits as to the 1924 cost of materials in place

Because Mr. Little had indicated that he thought there might be some decrease, in 1924, in the unit building costs shown in Mr. Burt's appraisal as of June 1, 1923, the appellee presented on rebuttal a series of exhibits compiled from the current records of the Northeastern Construction Company, by Mr. Ferris, Mr. Burt's chief assistant, Mr. Burt being at the time in Europe.

Exhibit No. 1032 (R. 2840; side folio 4205) showed a comparison in the rates of daily pay actually paid by the Northeastern Construction Company for the different classes of construction labor, as of June 1, 1923, and July 25, 1924. The *increases* range from 14.3 to 20 per cent., in 1924 over 1923. These are rates actually paid, aside from bonuses.

Exhibit No. 1033 (R. 2840; side folio 4206) showed a large number of clippings from the "help wanted column" of the *New York World* during July of 1924, in which wages at rates much higher than those paid by Mr. Ferris' Company, as Exhibit No. 1032, were offered for construction laborers of the different classes.

Exhibit No. 1034 (R. 2840; side folio 4208) illustrated, by taking the principal items in Mr. Burt's inventory and appraisal of purifier house "O," at the Eleventh Street plant of the appellee, the relative effect of the increased cost of labor and the decreased cost of materials, from June 1, 1923, to July 25, 1924.

Mr. Ferris demonstrated in detail, in Exhibit No. 1034 and in his direct and cross-examination as to it, that during this period the labor cost entering into the major items of this representative gas structure, increased 18 per cent. and the material cost decreased, on the whole, 10 per cent., so that *the net effect was that the cost of the materials in place was one per cent. higher on July 25, 1924, than on June 1, 1923.*

Mr. Ferris said frankly that on other buildings the relative changes in material prices and in the wages of labor of the different grades would produce slightly different final results. Some buildings would show slight net increase, and other buildings would show a slight net decrease.

The actual experience of this large construction company and the expert judgment of this disinterested witness were that the result shown in Exhibit No. 1034 was typical as to gas structures in New York City.

The appellee has earnestly hoped for several years, and still entertains the hope, that recession will come in the cost, in number of dollars, of the materials and labor used in the gas business—as soon as such recession can come through a sound economic readjustment, which would do no violence to the reasonable standard of living maintained by the appellee's employees. The appellee's rates have not been, and will not be, kept higher, in dollars, than at

the time is required, in dollars of like purchasing power, to defray the necessary costs of labor and materials.

The appellee *hopes,* as did the defendant Commission in August of 1922, that some recession in operating and construction costs will come about, on a sound economic basis. Such a reduction in costs may, and probably will, take place, sooner or later; but it is certainly true that the evidence adduced in this record shows that there has been no lowering in wages or in the cost to the appellee of its major materials, from those in force in 1918 and early 1919.

Nor was there recession during 1922 (the year of the prior decision, 1923 or 1924, down to the close of testimony. Since that time, the trend of wages has continued upward, and while there have been variations, up and down, there has been no material recession in the prices pertinent to this industry.

POINT TWO

STATUTE CLEARLY CONFISCATORY

The primary question in this case is confiscation. No witness for the defendant Commission or for the present appellant testified that a $1.00 rate for 650 B.t.u. gas would yield a fair return, or presented any computations to show that the appellee's net earnings were or might become sufficient, on any "rate base" which anyone suggested. The appellant's sole engineering witness, Mr. Little, outlined a radically revised plan for the location and operation of the appellee's plants (R. 1848-1858), which he figured might decrease slightly the present operating cost (R. 1858); but

in view of the consequences of this plan, taking into account the efficiency of the Manhattan plants, their suitability, the additional investment required for transfer mains, and other disadvantages he declined to advocate it on the trial (R. 1877-1895), and appellant abandons it in his brief (page 22).

Appellee contends that the statutory rate and standard are confiscatory beyond a doubt, on any basis which might fairly be considered within the record in this case:

(1) It is clearly confiscatory under the actual operating results, confiscatory under the Master's findings, and confiscatory even under the hypothetical estimate sponsored by appellant's counsel (Brief, p. 55), to which no witness ever testified and which, as we show on pages 73 to 76, *post*, makes only in this Court its first appearance in the case.

(2) It is clearly confiscatory whether tested by the actual cost of production, distribution, etc., of the gas sold by the appellee to its consumers, with all inter-company payments for use of property eliminated, or whether the operations of all of the system companies are treated as one, with operating expenses pooled, inter-company payments eliminated, a combined statement of system operating costs and revenues prepared, and all of the properties placed in a common "rate base."

(3) Irrespective of which of the above-indicated bases are adopted for figuring the net revenue which would be yielded by a $1.00 rate for 650 B.t.u. gas, that net revenue would not yield an adequate return upon the $216,153,025.31 of reproduction value proved by the appellee (substantially without contradiction), or upon the $134,101,738.77 of present

value found by the Master (by making drastic reductions) or even upon the $98,891,803.63 which represents the *actual investment* in the used and useful property, as found by this Court in 1922, plus subsequent net additions to such property as shown in the schedule on page 50, *ante*.

The following are comparative tables of the operating costs on the different bases:

COST OF GAS SOLD

Stated in cents per thousand cubic feet of gas sold

	ACTUAL OPERATING COSTS				COSTS ALLOWED BY MASTER AND COURT				
	Appellee 1923	System Cos. 1923	Appellee as of May 1, 1924	System Cos. as of May 1, 1924	Appellee 1923	System Cos. 1923	Appellee as of May 1, 1924	System Cos. as of May 1, 1924	Appellant's Claim (Brief, p. 55)
Cost of production	50.29	50.22	48.45	48.35	50.29	50.22	48.45	48.35	45.07
Cost of distribution	28.77	29.04	28.77	29.04	27.61	27.77	27.61	27.77	26.24
Taxes	10.76	13.69	10.76	13.69	10.02	10.53	10.02	10.53	9.40
Retirement expense	3.73	3.56	3.73	3.56	3.50	3.50	3.50	3.50	3.50
Total operating expenses	93.55	96.51	91.71	94.64	91.42	92.02	89.58	90.15	84.21
Miscellaneous operating revenue	8.72	9.65	8.72	9.65	8.48	9.39	8.48	9.39	8.48
Net operating expenses	84.83	86.86	82.99	84.99	82.94	82.63	81.10	80.76	75.73
Additional cost of supplying gas of statutory calorific content	5.19	5.19	5.02	5.02	5.19	5.19	5.02	5.02	5.02*
Net cost of gas of statutory standard	90.02	92.05	88.01	90.01	88.13	87.82	86.12	85.78	80.75
Gross revenue from sales of gas at statutory rates	99.86	99.86	99.86	99.86	99.86	99.86	99.86	99.86	100.00
Net income, at statutory standard and rates, applicable to the total property used by the appellee in its gas business	9.84	7.81	11.85	9.85	11.73	12.04	13.74	14.08	19.25*

Sources as to Appellee: Exhibit Nos. 888 and 1017; R. 2800, folio 4091; R. 2828, folio 4180.

Sources as to system companies: Exhibit Nos. 891 and 1018; R. 2800, folio 4129; R. 2828, folio 4187.

Sources as to Master's findings: R. 181, 183, 184.

* Appellant did not offer any proofs of additional cost of gas of the statutory standard (R. 1885) but his only engineering witness testified that appellee's estimate of 5.02 cents was too low (R. 1902). On the appellant's own claims, the net income of 24.27 cents shown on page 55 of appellant's brief would become 19.25 cents for gas of the statutory standard.

Sums required, over and above operating expenses, to yield fair return

For the system gas companies, the actual investment was $161,702,488.17, exclusive of going value (Ex. No. 891), or $4.39 per thousand cubic feet of gas sold, on which an eight per cent. return would be 35.1 cents, with 1.55 cents additional required for Federal income tax, making 36.65 cents as the total net revenue required, over and above all operating expenses, to yield an eight per cent. return on *investment.* The reproduction cost and present value figures for all of the system companies are not in this record.

The following computation summarizes the proofs and the findings pertinent to the amounts required for an eight per cent. return, on the property used by the appellee in its gas business, as of June 1, 1923:

	Reproduction cost found by Master	Present value found by Master	Actual investment found by Master
Total property	$162,559,692.48	$134,101,738.77	$98,891,803.63
Property per M. cubic feet of gas sold by appellee in 1923	$6.757	$5.574	$4.111
8% return thereon	54.06 cents	44.59 cents	32.89 cents
Add to provide for Federal Income tax at 1923 tax rate*	6.07 cents	4.72 cents	3.05 cents
Net Revenue required, over and above operating expenses, to yield 8% return	60.13 cents	49.31 cents	35.94 cents

*The appellee's 1923 operating expenses included the Federal income tax paid upon the net earnings actually realized, but did not include the Federal income tax which would be payable upon the *additional* net earnings comprising an eight per cent. return. To *net* the appellee an eight per cent. return over all operating expenses and taxes, including the Federal income tax, it is necessary to *add* the difference between the tax actually paid and the tax on such a return.

The following computation consequently shows, in sequence, the extent of the net deficiency which the statutory rate and standard would have produced, if applied to the various unit costs shown in the table on page 63, *ante:*

DEFICIENCY OF APPELLEE'S NET OPERATING REVENUE BELOW EIGHT PER CENT. RETURN ON REPRODUCTION COST AS FOUND BY MASTER AND COURT

(Stated in cents per thousand cubic feet of gas sold)

	Actual operating results		As allowed by Master and Court		Appellant's Claim (Brief, p. 55)
	1923	May 1, 1924	1923	May 1, 1924	
Net operating revenue realized	9.84	11.85	11.73	13.74	19.25
Net operating revenue required to yield eight per cent return on Master's reproduction cost	60.13	60.13	60.13	60.13	60.13
Deficiency below eight per cent. return on Master's reproduction cost, under $1.00 rate	50.29	48.28	48.40	46.39	40.88*

* Based on gas of not less than 650 B.t.u. Deficiency would be 5.02 cents *less*, per thousand cubic feet, for gas of quality now being supplied (see Point Four, *post*).

DEFICIENCY OF APPELLEE'S NET OPERATING REVENUE BELOW EIGHT PER CENT. RETURN ON PRESENT VALUE AS FOUND BY MASTER AND COURT

(Stated in cents per thousand cubic feet of gas sold)

	Actual operating results		As allowed by Master and Court		Appellant's Claim (Brief, p. 55)
	1923	May 1, 1924	1923	May 1, 1924	
Net operating revenue realized	9.84	11.85	11.73	13.74	19.25
Net operating revenue required to yield eight per cent. return on present value (including Federal income tax)	49.31	49.31	49.31	49.31	49.31
Deficiency below eight per cent. return on present value, under $1.00 rate	39.47	37.46	37.58	35.57	30.06*

* Based on gas of not less than 650 B.t.u. Deficiency would be 5.02 cents *less*, per thousand cubic feet, for gas of quality now being supplied (see Point Four, *post*).

DEFICIENCY BELOW EIGHT PER CENT. RETURN ON ACTUAL INVESTMENT

(In cents per thousand cubic feet of gas sold)

	ACTUAL OPERATING RESULTS				AS ALLOWED BY MASTER AND COURT				
	Appellee 1923	System Cos. 1923	Appellee May 1, 1924	System Cos. May 1, 1924	Appellee 1923	System Cos. 1923	Appellee May 1, 1924	System Cos. May 1, 1924	Appellant's Claim (Brief, p. 55)
Net operating revenue realized	9.84	7.81	11.85	9.85	11.73	12.04	13.74	14.08	19.25
Net operating revenue required to yield eight per cent. return on present investment.....	35.94	(a)36.65	35.94	(a)36.15	35.94	(a)36.65	35.94	(a)36.15	35.94
Deficiency below eight per cent. return on investment under $1.00 rate	26.10	28.84	24.09	26.30	24.21	24.61	22.20	22.07	16.69*

(a) The Master did not find the value of or investment in the system companies' properties, other than properties jointly used. The amounts shown above appear in Appellee's Exhibits Nos. 891 and 1018 (R. 2800; folio 4129; R. 2828, folio 4187).

* Based on gas of not less than 650 B.t.u. Deficiency would be 5.02 cents *less* per thousand cubic feet for gas of the quality now being supplied (see Point Four, *post*).

As shown under Point Five, *post,* we think the Master's present value finding was much too low, as was his reproduction cost, under undisputed proofs. But regardless of whether the "rate base" is taken at the reproduction value, or at the Master's present value, or at the investment adjudicated in the prior case, the statutory rate and standard was and is confiscatory. This is true alike whether we take the appellee's *actual* operating costs, which were shown to be reasonable by undisputed testimony, or the actual costs after the Master's eliminations which are discussed under Point Twenty-three, *post.*

Under the appellee's actual operating costs for 1923, the statutory rate would yield only 1.77 per cent. on present value and only 2.39 per cent. on the adjudicated investment. It would have yielded an *eight* per cent. return upon only $1.23 of property per thousand cubic feet of sales.

Under the Special Master's *diminished* operating costs, the $1.00 rate would have yielded only 2.10 per cent. on present value and only 2.85 per cent. on the actual, adjudicated investment. It would have yielded an *eight* per cent. return on no more than $1.47 of property per thousand cubic feet of sales.

Even under the appellant's fanciful estimate of operating expenses, which is not for gas of the prescribed standard of 650 B.t.u., but is applicable to the quality actually supplied, in 1923, the statutory rate would yield only 4.35 per cent. on the Master's present value and only 5.9 per cent. on the actual, adjudicated investment. If appellant's inadequate figures are augmented to reflect the cost of 650 B.t.u. gas by the addition of 5.02 cents (Mr. Little said Mr. Woods' was too low in his estimate; R. 1902), the yield becomes only 3.45 per cent. on the Master's present value and 4.68 per cent. on the investment. Even on the appel-

lant's own present estimate of the appellee's operating expenses, the $1.00 rate would have yielded an eight per cent. return on only $3.03 of property per thousand cubic feet of sales, and the appellant does not contend that the "rate base" should be less than $3.50 (Brief, page 31), whereas the appellee's unit investment is $4.11 and the present value $5.57, per unit of sales.

Master's findings as to the return permitted the appellee by statutory rate and standard

Summing up the operating results and the return yielded, on the bases of the Master's findings, in the different years, the effect of the enforcement of Chapter 899 of the Laws of 1923 upon the operations of the appellee during the year 1922 (computed on the basis of the elimination from the appellee's operating expenses of the various items of actual expense excluded by the Special Master and also the elimination of all interest or return upon property owned by it or owned by affiliated gas companies) would have been to produce a net income of 8.25 cents per thousand cubic feet of gas sold by the appellee; and such income would have yielded a return upon the property used by the appellee in its gas business as of December 31, 1922, of only 1.06 per cent. upon the reproduction cost and only 1.72 per cent. upon the actual investment in such property. Even for gas of the quality actually furnished, the $1.00 rate would have yielded a return on the investment of but 2.38 per cent. and on the reproduction cost of but 1.47 per cent. (Finding No. 108, R. 203-204).

The like effect of the enforcement of Chapter 899 of the Laws of 1923 upon the operations of the appellee during the year 1923 would have been to yield a net income of 11.73 cents per thousand cubic feet of gas sold by the appellee; and such net income would have yielded a return upon

the property actually used by the appellee in its gas business, as of June 1, 1923, of only 1.73 per cent., and as of December 31, 1923 (after the withdrawal of the 14th and 42nd Street stations), of only 1.82 per cent., upon the reproduction cost thereof, and only 2.85 per cent. upon the actual investment, and only 2.10 per cent. and 2.17 per cent. respectively upon the present value thereof. Even for gas of the quality actually furnished in 1923, the dollar rate would have yielded a return of but 4.11 per cent. on the investment as of June 1, 1923, and on December 31, 1923; of but 2.50 per cent. and 2.62 per cent., respectively, on the reproduction cost found as of those dates; and of 3.03 per cent. and 3.13 per cent., respectively, on the present value as of those dates (Finding No. 109, R. 205).

Based upon the cost of the manufacture and distribution of gas as of May 1, 1924 (the latest day as of which the operating costs were shown in this record), the effect of the enforcement of the dollar rate and statutory standard would have been to yield a net income of 13.74 cents per thousand cubic feet of gas sold by the appellee, equivalent to a return upon the property used by the appellee in its gas business as of June 1, 1923, and as of December 31, 1923, of 3.34 per cent. upon the investment, and of 2.03 per cent. upon the reproduction cost as of June 1, 1923, and of 2.13 per cent. upon the reproduction cost as of December 31, 1923. On the present value of such property, as of June 1, 1923, and December 31, 1923, the return would have been only 2.46 per cent. and 2.55 per cent. respectively. On the basis of the gas actually furnished, it would give a return on the investment as of June, 1923, and as of December, 1923, of 4.56 per cent., on the reproduction cost as of those dates of 2.77 per cent. and 2.91 per cent., respectively, and on the present value as of those dates of 3.37 per cent. and 3.48 per cent. respectively (Finding No. 110; R. 206).

If applied to the actual operations of the appellee in its gas business, including in the appellee's operating expenses the sums actually paid by it for return on investment in property owned by other companies devoted to appellee's use, (*i.e.*, recognizing the existing separate corporate entities of the affiliated gas companies, in the treatment of their property), the effect of the enforcement of the dollar rate and statutory standard, for the year 1922, would have been to deprive the appellee of any return whatever upon its property and to impose a *direct operating loss* of $697,355.22, or 3.39 cents per thousand cubic feet of gas sold (Finding No. 111; R. 207); for the year 1923, the effect would have been to allow the appellee a return of only $601,746.50, upon its own property, or 2.49 cents per thousand cubic feet of gas sold by it. This sum is substantially less than one per cent. upon the actual investment in the property so used (Finding No. 112; R. 208).

The Special Master set forth in tabular form (R. 135) the amount of the investment, reproduction cost and present value as found by him, the amounts which would be required to yield a return thereon at rates of six, seven or eight per cent. per annum, and the return which *would* have been earned by the appellee at the dollar rate, on each the basis of the quality of gas actually furnished and the basis of the statutory standard of not less than 650 B.t.u., from which may be computed the margin of loss that would have been sustained by the appellee if the statutory rate with or without the statutory standard were enforced. The schedule follows:

		Net revenue required to yield			*Net revenue under $1.00 rate—1922*	
	Dec. 31, 1922	6 per cent.	7 per cent.	8 per cent.	On basis of quality gas actually furnished	On 650 B.t.u. basis
Investment cost	$98,561,127.40	$5,913,667.64	$6,899,278.92	$7,884,890.19	$2,346,357.18	$1,698,078.18
Reproduction cost	159,710,750.73	9,582,645.04	11,179,752.55	12,776,860.06		
	June 1, 1923					
Investment cost	98,891,803.63	5,933,508.22	6,922,426.25	7,911,344.29	*Net revenue under $1.00 rate—1923*	
Reproduction cost	162,559,692.48	9,753,581.55	11,379,178.47	13,004,775.40	$4,072,181.08 at May 1, 1924, prices	$2,823,586.75
Present value	134,101,738.77	8,046,104.33	9,387,121.72	10,728,139.10	$4,515,227.47	$3,307,531.22
	Dec. 31, 1923					
Investment cost	98,917,970.64	5,935,078.24	6,924,257.94	7,913,437.65	*Net revenue under $1.00 rate—1923*	
Reproduction cost	155,065,633.85	9,303,938.03	10,854,594.37	12,405,250.71	$4,072,181.08 at May 1, 1924, prices	$2,823,586.75
Present value	129,760,683.77	7,785,641.03	9,083,247.87	10,380,854.70	$4,515,227.47	$3,307,531.22

POINT THREE

APPELLANT'S PRESENT "ESTIMATE" OF OPERATING COSTS

Under Point II of his brief (page 38), the appellant contends that "the operating expenses of the appellee should not be allowed at a sum greater than 75.73 cents per M. cubic feet sold after deducting miscellaneous operating revenue." In support of this assertion, he presents (page 55) what he calls "a summary of the net cost of production and distribution of gas," the unit figures of which are here shown in connection with the actual costs and the Master's allowances for the same items:

(cents per thousand cubic feet of gas sold)

	Cost as of May 1, 1924		
	As Proved by Appellee	*Allowed by Master and Court***	*Appellant's Claim (Brief p. 55)*
Cost of production	48.45	48.45	45.07
Cost of distribution	28.77	27.61	26.24
Retirement expense	3.73	3.50	3.50
Taxes	10.76	10.02	9.40
Total operating expenses	91.71	89.58	84.21
Miscellaneous operating revenue	8.72	8.48	8.48
Net operating expenses	82.90	81.10	75.73
Additional cost of supplying gas of statutory calorific content	5.02	5.02	....*
Net operating expenses	82.99	81.10	75.73
Gross revenue from sales of gas at statutory rate	99.86	99.86	100.00
Net earnings available for return	11.85	13.74	24.27*

*These net earnings claimed by the appellant would be reduced to 19.25 cents for gas of 650 B.t.u., as the appellant's computation is only for the cost of the gas actually supplied (see Point Four, *post*).

**The District Court stated "In determining operating expenses, items open to controversy are eliminated and operating expense is reduced to its lowest terms. * * * But in view of the Court's conclusion that the act is unconstitutional, confiscatory and void, even with these debatable items decided by the Master against the plaintiff, it is not necessary for this Court to pass on these specific matters."

It will be noted that the *deductions* claimed by the appellant are as follows:

	From May 1, 1924, cost proved by appellee	From May 1, 1924, cost allowed by Master and Court
Cost of production	3.38 cents	3.38 cents
Cost of distribution	2.53 "	1.37 "
Retirement expense	.23 "	..
Taxes	1.36 "	.62 "
Total further deductions from operating expenses	7.50 cents	5.37 cents

In addition to making the foregoing further deductions from operating expenses, the appellant's "estimate" fails to add at least 5.02 cents for the additional cost of making gas of not less than 650 B.t.u. It was the opinion of Mr. Little that Mr. Woods' figure for this item was too low (R. 1902). The appellant's estimated net operating revenue is thus 12.42 cents more than the actual, and 10.53 cents more than that allowed by the Master and Court. Allowance of the added cost of gas of the statutory standard would reduce these figures to 7.40 cents and 5.51 cents, respectively.

Appellant constantly shifts and revises his own "estimates"

Before taking up the different items and examining the grounds on which the appellant asks this Court to discard the actual, average costs and substitute improvised and speculative calculations of counsel, to which no one has ever testified, it should be noted that appellant never seems to be sure of his own figures. In his eagerness to devise something to put in the place of the actual costs, he is constantly changing and revising *upward* his own hypothetical calculations of cost.

The only assignments of error by the appellant concern-

ing the District Court's finding of the appellee's cost of making and distributing gas are numbered 5, 7, 9, 10 and 13 (R. 329, 330, 331). In his assignment of error to the Special Master's findings (Nos. 64 and 65) that the cost of making and distributing gas for the years 1922 and 1923 and as of May 1, 1924, was 88.46, 82.94, and 81.1 cents, $.8110 respectively (R. 180, 181), the appellant asserted (R. 331):

> "The cost of distribution is higher by at least three cents than the reasonable and necessary cost of such distribution because of improper allocation of the expenses of the System company; the cost of production is too high because it is not based upon the results obtained at the plants of the Astoria Light, Heat & Power Company; the amount set out for taxes is too high because there is included in it the large taxes on the 14th Street and 42nd Street plants hereinabove referred to. The Court should have found that the reasonable and necessary cost of making and distributing gas in 1924 should not have exceeded the sum of 73.65 cents."

In the statement of appellant's points to be relied upon, he stated in similar figures his contention as to the amount of the cost to make and distribute gas (R. 3074).

The progress of his calculations as to the cost of the production and distribution of gas by the appellee, may be sketched by the following summaries from the three briefs of the Attorney-General in this case:

(cents per thousand cubic feet of gas sold)

	Before Master	Before District Court	Before this Court
Cost of production	44.66	42.91	45.07
Cost of distribution	26.27	26.32	26.24
Taxes	6.71	9.40	9.40
Renewals and replacements	3.50	3.50	3.50
Total operating expenses	81.14	82.13	84.21
Miscellaneous operating revenue	8.47	8.48	8.48
Net operating cost	72.67	73.65	75.73
Available for return	27.33	26.35	24.27

No witness testified to any of these three estimates of the cost. Each of them has been prepared since the testimony closed, in an effort to substitute a calculated figure for the actual. It will be noted, however, that this diligent estimater has increased his estimate of the appellee's 1924 costs 2.08 cents per thousand cubic feet since he was in the District Court and 3.06 cents since his brief before the Master. On the basis of the appellee's 1923 sales of 24,-057,694,000 cubic feet of gas, this is equivalent to an increase of $500,400 since the District Court briefs and $736,-165 since the briefs before the Master.

Nor is the change merely one of *mathematics.*

In his brief before the District Court, the appellant selected a combination from the unit costs of individual units at the Astoria plant, to produce a production cost of 40.06 cents per thousand cubic feet *made.* To this he added for gas storage one cent (although the actual costs were 1.09 cents; R. 175), and he then made an erroneous mathematical computation to convert this total of 41.06 cents per thousand cubic feet *made* to 42.91 cents per thousand cubic feet *sold.*

In his brief before this Court (page 41), appellant has selected a different combination of the various unit costs at Astoria and arrives at a unit cost of 42.03 cents per thousand cubic feet of gas *made.* Again he computes incorrectly from this the cost per thousand cubic feet *sold,* and after including gas storage this time at 1.09 cents, he reaches a figure of 45.07 cents which he uses as the cost of production. Even on the basis of a holder cost of 43.12 cents (Brief, page 43), this figure of 45.07 is incorrect. The relationship of "sales to make" in 1923 was 95.38 per cent. (Ex. No. 888; R. 2800; side folio 4091). Applying this correctly to 43.12 gives 45.21. Even on the grouping and selec-

tion of production costs assumed by him, the correct mathematical result is thus 45.21 cents, and not 45.07 cents.

These "unit production costs," urged before the District Court and this Court, are each in turn different from the figure of 44.66 cents which he urged upon the Master.

On the other hand, appellant has revised *downward* his unit cost of distribution, from that urged before the District Court. To accomplish this, he adopts the means of deducting from the cost of distribution $115,042.57 as representing interest on unpaid taxes, when the cost of distribution never included such item, either in the proofs submitted or in the findings of the Special Master. As a result of this bungling or artful deduction, he has eliminated 48/100ths of a cent from the appellee's cost of distribution.

The corrections merely of elementary *arithmetic* in the appellant's *table* (Brief, p. 55), entirely aside from the soundness or pertinency of his *claims,* result in a net cost of 76.35 cents, instead of 75.73 cents or an increase of 0.62 cents. With the added cost of gas of 650 B.t.u., the appellant's basic figure becomes 81.37 cents, *not* 75.73 cents—errors and omissions which make a difference of 5.64 cents or $1,356,854 per year, wholly aside from any question of the merits of the appellant's claims for deductions from operating expenses.

The foregoing does not seem to afford a very solid and convincing basis for substituting for actual results the latest form of a hypothetical calculation by counsel.

Fallacies underlying appellant's attack on appellee's operating costs

Before taking up the detailed items of difference, shown in the comparative table on page 74, *ante*, we may refer to some of the misapprehensions and mis-statements indulged in by appellant. He refers to the appellee's "enormous output" (p. 39), and infers from it that the appellee should necessarily have a lower cost. As shown on pages 155 and 156, *post*, the *load factor* is the more important in gas rather than either population or mere volume of output, and the load factor is unfavorable in Manhattan.

Appellant *assumes* persistently that all of Judge Hand's assumptions and bases of 1919 should perforce be adopted now, despite changes in conditions and differences in the record, as shown under Point Fourteen, *post*. Judge Hand passed on the conditions and proofs *before him;* the present Master and Judge Winslow did the same thing. For example: Judge Hand charged to the appellee's consumers the entire operating and carrying charges of the Astoria tunnel; in 1923, the appellee's consumers were charged with only 56.44 per cent. of that cost (R. 1112; side folio 1699). Should Judge Winslow have disregarded the facts of the *present* record?

Appellant alleges (pp. 40, 41) that there is a difference of more than seven cents per thousand cubic feet "between the Consolidated cost and Astoria cost" and a "difference of from 8 to 11 cents in water gas costs between the Astoria plants and Manhattan plants, without taking into account the three-cent difference in taxes." There is no such difference. Exhibit No. 1035 (R. 2845-2849) shows that the cost *in Manhattan* of gas made at Astoria is a fraction of a cent higher than the cost of the gas made at the appellee's Manhattan plants.

Appellant's purported unit costs, on pages 40 and 41 of his brief, are a queer jumble. The 1922 and 1923 figures are Mr. Little's "estimates" for the appellant (R. 1848-1858), subsequently discarded by Mr. Little himself (R. 1880-1882, 1886, 1889, 1890). The higher cost of 22-candle power gas affected 1922 operations down to October (R. 48). The comparison of taxes is utterly misleading. The inclusion of storage holders destroys any true relation, and the computed units shown for taxes are materially increased or decreased according to the extent to which one plant or another may have been closed down in the summer period.

The details are not in the record upon which to base or check the tax figures shown. The alleged figure for taxes applicable to Manhattan is conceded to include taxes upon holders which are used equally for the distribution of gas from Long Island and gas made in Manhattan. As to both the Astoria and New Amsterdam tax figures, the taxes on the tunnels and connecting mains to convey the gas to Manhattan, would have to be added. As to the New Amsterdam figures, neither the total quantity of gas made nor the amount of taxes paid is in the record. The estimated figure purported to represent the New Amsterdam taxes is evidently derived from the Woods report, and not from taxes actually levied.

It is also erroneous to assert that the holder stations would add two cents to this alleged difference. Holder stations would be necessary in Manhattan, whether all of the gas was made in Astoria, or whether it was all made in Manhattan.

Appellant's three principal contentions as to the cost of manufacturing gas

Appellant's brief (Point II) seems to us to jumble together three different assertions, in an effort to argue that the appellee should not be allowed its actual operating costs:

(1) That the appellee's Manhattan plant-sites are "too expensive" land and are held only as "real estate speculations," and that these Manhattan plants should be abandoned and all the gas made at Astoria.

(2) That the cost of making and delivering the gas which is made at the appellee's Manhattan plants is higher than the cost of making and distributing gas from Astoria.

(3) That in testing a rate prescribed for all of the gas it sells, the appellee should be allowed only the unit operating costs as charged at a particular plant.

(1) Should the Manhattan plants be abandoned?

The *real estate* aspects of appellant's contention (1) are discussed under Point Twelve, *post*. We shall treat here only the *desirability and practicability* of such a plan, and its effect on the cost of the gas sold by the appellee.

A hypothesis of costs calculated on the abandonment of all the Manhattan plants was presented on the trial by Mr. A. S. B. Little, the engineering expert employed by the appellant (Defts'. Ex. No. 95; R. 1848-1858). This estimate Mr. Little frankly avowed was not based upon any practical working of the facilities existing or available to the

appellee, but upon the hypothesis of producing all of the gas at the Astoria plant, a plan which he himself would not recommend (R. 1880, 1882, 1886, 1889, 1890).

Appellant's counsel (Brief, page 42), disclaims any desire to claim the "benefit" (?) of Mr. Little's *estimate,* but then proceeds to make one of his own, on similar hypothesis, viz., the abandonment of the Manhattan plants and the substitution of plant capacity at Astoria.

An assumption or estimate which pre-supposes a transplantation of the appellee's existing plants from Manhattan to the Astoria plant of another company and then the transformation of the operations at Astoria, contemplates the exercise of a regulatory function in respect to plants and operation that cannot be exercised in rate-making.

> *In Re Pacific Telephone & Telegraph Co.,* P. U. R. 1922-C, 248, 265; 20 Rate Research 387, 391;
>
> *Chicago Railways Co.* v. *Illinois Commerce Commission,* 277 Fed. 970, 980-981 (Spec. Stat. Ct.).

The defendant Public Service Commission, in a recent decision *In re Gas Rate of Brooklyn Borough Gas Company* (Case 79-E, decided May 10, 1922), in commenting upon the estimates placed in evidence by Mr. Little in that case, said:

> "While full consideration may be given to the estimates shown in the City's exhibits, it is apparent that the Commission should be guided by the results of operations based upon actual costs instead of upon estimates."

The power of regulation and supervision over the prop-

erties and operations of the appellee is confided by the State of New York to the defendant Public Service Commission, under a comprehensive regulatory statute. The Commission in its orders affecting the appellee (Exhibit Nos. 208, 209; R. 45, 48) did not require the appellee to cease or abandon the operation of any of its properties or to change the mode or place of manufacture of the gas required by the appellee, except to the extent necessary to produce and deliver gas of a monthly average of not less than 537 B.t.u. The appellant's contention that by the promulgation of a particular rate the Legislature could indirectly presume to assume the functions of management of the appellee's mode and place of manufacture is untenable.

State of Missouri ex rel. Southwestern Bell Telephone Co. v. *Public Service Commission of Missouri,* 262 U. S. 276, 288-89;

Ohio Utilities Co. v. *Public Utilities Comn. of Ohio,* 267 U. S. 359;

Northern Pacific Ry. Co. v. *Department of Public Works of Washington,* 268 U. S. 39;

Banton v. *Belt Line Railway Corporation,* 268 U. S. 413, 421;

Kings County Lighting Co. v. *Prendergast,* 7 Fed. (2nd), 192;

City of Erie v. *Public Service Commission,* 278 Pa. St. 512; 123 Atl. 471;

Kansas v. *Southwestern Bell Tel. Co.,* 115 Kans. 236; 223 Pac. 771;

People ex rel. Delaware and Hudson Co. v. *Stevens,* 197 N. Y. 1;

New York and Richmond Gas Co. v. *Prendergast,* 10 Fed. (2nd), 167; P. U. R. 1925 E, page 19;

Los Angeles and Salt Lake R. R. Co. v. *United States,* 8 Fed. (2nd), 747;

Citizens' Gas Co. of Hannibal v. *Public Service Commission of Missouri,* 8 Fed. (2nd) 632;

Havre de Grace and P. Br. Co. v. *Towers,* 132 Md. 16;

Northwestern Bell Telephone Co. v. *Spillman,* 6 Fed. (2nd), 663.

Appellant's own expert advised continuance of Manhattan plants

Asked by the Master whether it would be advisable to abandon the Manhattan plants for Astoria, Mr. Little strongly advised against it, saying (R. 1889-1890):

> "But of course I would not like to go as far as to say that that is what should be done, because then you would be getting pretty nearly all your eggs in one basket. In that event, if anything happened to the tunnels, Manhattan would be in a serious fix. * * *
>
> The Master: Would there be a risk in having such a large capacity together—such a large proportion of the necessary capacity?
>
> The Witness: Do you mean a risk to the locality adjacent to the plant or to the consumers?
>
> The Master: No, I mean to the service.
>
> The Witness: I believe there would, your Honor, in view of the East River intervening between the manufacturing point and the point of use. * * *
>
> Q. Do I accurately understand your testimony up to this point to be that you believe that at least the Consolidated should have an Astoria plant and a Hunts Point plant and also plants at 11th Street and 21st Street to insure service at lower Manhattan, and at least for the present continuing the operation

of 99th Street for experimentation on a large scale? A. I believe that should be the method of developing the business. Of course, after five years it is speculative as to what would happen as to 11th Street and 21st Street."

The efficiency and suitability of the Manhattan plants

Mr. Little testified that the Manhattan plants of the appellee, in comparison with other gas plants that he had seen in other parts of the country, were "reasonably efficient and well-designed" and were "excellently maintained" with the exception "perhaps" that at the Mutual plant some of the machines were "not quite up to date" (R. 1877). He said, however, that the Mutual plant "was in an excellent state of maintenance; not only in the machines but I was agreeably surprised at the state of upkeep of the surrounding parts" (R. 1877); it was "in a very good state of repair and upkeep. The Astoria is, too. At the 21st Street plant the machines appear to be in good shape, * * *" (R. 1877).

It would be no ground for abandoning the Manhattan plants if their operating costs were sometimes slightly higher than the cost to the appellee, in Manhattan, of gas made at the Astoria plant (which, as shown hereinafter, is not the fact). Mr. Little testified (R. 1878-1880):

"*By Mr. Ransom:*

Q. Would you say that taking into account both the direct operating cost and the cost of the carrying charges on the investment—that is, taking into account both the operating expenses and the carrying charges on the amount of property used in the manufacture of gas—that the 21st and former Mutual plants, and the 99th Street plants, are reasonably efficient and economical plants compared with others

that you have seen in different parts of the country? A. Yes, I would not dispute that statement at all.

Q. In determining whether a given plant or a unit in a plant is economical or not, you have got to take into account, haven't you, both the direct outlays for labor and materials in operation and the cost of money or carrying charges on the amount of property required? A. It should be done, but it sometimes is not. * * *

Q. That is, for example, the fact that one plant has a little lower direct operating cost as compared with another plant, would not in itself determine that the first plant was the more economical, would it? A. No.

Q. Or vice versa? A. That is right. You would have to study the whole thing—

Q. Yes? A. And find out what it would cost to put the old plant in a position to make gas as economically as a new plant, that is, find out what your carrying charges were and see if they were high enough to offset any saving you would get in the direct manufacturing cost.

Q. That might be true of two plants installed on the same date? A. Yes.

Q. For example, in one plant you might have more labor-saving machinery for handling coal and the like, than in another? A. That is right.

Q. Consequently, in the plant that had the less of the labor-saving machinery, you would have the higher labor costs of operation, probably? A. That is right. * * *

Q. But at least you have got to take into account two things: On the one side the direct cost of labor and materials and on the other the carrying charges on the present value of the property, haven't you? A. Yes, and a further thing, Judge, that I have always taken into account, and that is the amount of power used in driving these labor-saving devices. * * *"

Mr. Little finally agreed that he would not advise the abandonment of the manufacture of gas in Manhattan (R. 1880):

"*By Mr. Ransom:*

"Q. Well, don't you realize that there are, as has been testified to here by several witnesses, substantial, practical advantages in manufacturing some of the gas in Manhattan? A. Oh, yes, there are some advantages; no doubt about it.

Q. Under the conditions as they now stand, would you advise the abandonment and withdrawal from use of these three Manhattan plants? A. As to 11th Street and 21st Street, no. As to 99th Street, I would not be so positive. * * *

Q. As I understand your testimony, as to the 11th Street and 21st Street plants, you would not advise their abandonment and withdrawal? A. No.

Q. But that as to 99th Street, although you would not advise its abandonment and withdrawal, you think it might be advisable to conduct what might be regarded as the manufacture of gas there on an experimental basis? A. Yes, use it as a research station, like many plants do in Europe.

Q. By that I take it you mean that under the European practice some of the smaller plants which actually manufacture gas for commercial purposes are operated on what might be regarded to some extent as an experimental basis? A. That is correct. I so built one of that character in Birmingham.

Q. The gas which they made would be sent out on the district? A. Yes, it would not be lost."

Manhattan plants needed to ensure continuous supply of gas

He also testified that there was need for the plants in lower Manhattan, in order to ensure continuity of supply and pressure (R. 1881-82):

Q. Well, under present conditions in the gas industry, having in mind the physical location of Manhattan Island and these rivers and tunnels, don't you feel that there are advantages as to assurance of continuity of service in making some gas in Manhattan? A. Well, as to the lower part of Manhattan, yes.

Q. For example, if you were in charge of the operation of this company or a similar company in this territory, would you feel that you had a better certainty of keeping gas going in lower Manhattan if the 11th Street and 21st Street plants were there and were operating? A. That is true, of course, because there might be a break in your main system which would put the lower end of Manhattan in danger unless you had plants near the center of the territory from which gas can be furnished."

Additional investment and annual costs involved in removal of plants from Manhattan

If the Manhattan water-gas plants were abandoned, and the additional capacity were provided in the ratio between coal-gas and water-gas now making up the balanced plant at Astoria, the additional coal-gas plant would mean a larger capital investment per thousand cubic feet of gas sold; and the present value of that additional property would have to earn a return, and the return on that additional property would have to be taken into account as offsetting any decrease in the production cost as the result of the transfer of manufacturing capacity to Astoria (R. 1893).

In addition, the greater the percentage of coal gas made and delivered, the greater is the amount of holder capacity which would be required, and that would tend to increase the investment per thousand cubic feet of gas sold, and the

return on that additional amount of property would have to be taken into account as a factor offsetting any decrease in the production cost if the necessary plant capacity were all provided at Astoria (R. 1893-1894).

There would also be required, under appellant's plan, additional transfer mains from Astoria to Manhattan, and the amortization of the investment in the Manhattan plants, which would entail large carrying charges. Mr. Little testified (R. 1894-1895):

> "*By Mr. Ransom:*
>
> "Q. If the existing transfer mains were not large enough to bring that quantity of gas down to that territory now served directly from the 21st and 11th Street plants, why, you would have to have those mains installed and you would have to earn a return on the present value of them, wouldn't you? A. You would have to have the mains and the pumping machinery.
>
> Q. And their present value would be a factor on which the rates would have to provide for a return? A. That is obvious. * * *
>
> Q. Now, if you were going to abandon and withdraw all of the plant and equipment of the 21st Street and 11th Street and 99th Street plants and make all of your gas at Astoria, you would have to have economies therefrom which would be sufficient to amortize the investment in the existing plants, would you not? A. Eventually you would have to amortize them, yes; that is, you would have to commence amortizing them at once in a certain ratio, so that eventually they would be amortized completely. * * *
>
> Q. Well, the reason why you would discontinue them now if you were to do such a thing would be that economies would result, wouldn't it? A. Economies after taking everything into account.
>
> Q. Yes; taking into account both direct operating

costs and return on present value of property? A. Right.

Q. And other factors being equal, you would not retire them unless you could get enough economies out of the production in the new site to amortize the investment in the old, would you—other things being equal? A. I would not."

Chief Engineer Woods showed the wisdom and economy of continuing the Manhattan plants

Mr. Woods testified that, in the regular course of his duties for the appellee, he had studied the question of whether the 11th, 21st and 99th Street plants should be retired and the gas made at some other point, such as Astoria. He was decidedly of the opinion that these plants in Manhattan should not be retired, but should be continued to be maintained and operated (R. 1956). Mr. Woods believed that it would not be economical to retire and amortize the three Manhattan plants, but that, on the contrary, it would be uneconomical in the interest of the consumers to do any such thing (R. 1956-57). Taking into account both property and operating expenses, Mr. Woods testified, the variation in efficiency of the different plants was not more than one and a half per cent.

Mr. Woods also testified that in order to transplant to Astoria the production of gas now made at the Manhattan plants of the appellee, it would be necessary to install additional transfer mains and pumping facilities to deliver gas from Astoria to points in Manhattan where gas is now being furnished from existing plants in Manhattan, and that the cost of such transfer mains and pumping facilities would be $6,000,000 (R. 1956).

(2) Can the appellee get its gas more cheaply from Astoria than from its Manhattan plants?

The appellant's *second* fallacy on this subject is that gas manufactured at Astoria can be delivered in Manhattan more cheaply than gas made in the Manhattan plants, after all costs and carrying charges have been considered.

Chief Engineer Woods submitted a statement showing a comparison between the Astoria water-gas costs and the Consolidated water-gas costs, for the period January 1, 1922, to April 30, 1924 (Pltf.'s Ex. No. 1025; R. 2828, folios 4198; 1951). This comparison showed that the actual cost of manufacture of water gas at Astoria during the period mentioned was 43 cents per thousand cubic feet of gas made, and that such cost, upon the basis of the unit prices paid for labor and material at the appellee's plants, would have been 46.23 cents per thousand cubic feet of gas made, while the actual cost of water gas at the appellee's plants in Manhattan during the same period was 48.65 cents per thousand cubic feet of gas made; or, in other words, that the operating results at the Astoria water-gas units, apart from variation in prices of labor or material for water-gas manufactured, were 2.42 cents per thousand cubic feet of gas lower than at the Manhattan plants (Pltf.'s Ex. No. 1025; R. 2828, folio 4198).

Mr. Woods also presented a statement showing a comparison between the cost of production from January 1, 1922, to April 30, 1924, of *all* gas (coal and water-gas) made at the Astoria plant, and *all* gas made at the Consolidated plants (Pltf.'s Ex. No. 1027; R. 2828, folio 4200). This showed that the cost of all gas, coal and water, made during that period at the Astoria plant was 45.94 cents

per thousand cubic feet of gas made, and that the cost of all gas made at the Consolidated plants during the same period was 48.65 cents per thousand cubic feet of gas made.

But, as Mr. Little admitted, as shown on pages 83 to 86, *ante*, mere comparison of production costs at the Manhattan and Astoria plants would not be conclusive without a consideration of the carrying charges which go to make up the total cost of the commodity, and Mr. Woods extended his comparisons so as to give recognition to the factor of carrying charges (R. 1966-1967; Ex. No. 1035, R. 2845-2849). Exhibit No. 1035 showed the investment in the 11th, 21st, and 99th Street plants of the appellee and in the plant of The Astoria Company, from January 1, 1922 to April 30, 1924, for the purpose of determining the cost of carrying these properties per thousand cubic feet of gas actually made at these plants during the period mentioned. The carrying charge for the investment in the plants in Manhattan was shown to be equivalent to 12.91 cents per thousand cubic feet of gas made at those plants, while the carrying charge of the investment in the Astoria plant was shown to be equivalent to 16.13 cents per thousand cubic feet of gas made at that plant. Taking into consideration both the operating expenses and the carrying charges, Mr. Woods showed that the cost of operation at the Manhattan plants was at least as low as at the Astoria plant, as set forth in the following summary of Plaintiff's Exhibit No. 1035:

Comparative summary of cost of operation at the appellee's Manhattan plants and of the Astoria plant

	Cents per M. cu. ft. made
Cost of gas at Astoria plant during period January 1, 1922 to April 30, 1924	45.94
Carrying charge and taxes	16.13
Total cost including taxes and return on investment	62.07
Cost of gas at the appellee's plants during this period	48.65
Carrying charge and taxes	12.91
Total cost including taxes and return on investment	61.56
Astoria cost in excess of appellee's costs, after giving effect to return on investment and taxes on property devoted to the manufacture of gas	0.51

Table showing the additional investment and the annual carrying charges thereon which would be necessary in order to carry out the transfer to Astoria of the present production of gas at the Manhattan water-gas plants

(Such a transfer would require the entire present plant capacity at Astoria, together with 67,000 M. cu. ft. of additional daily plant capacity of coal and water gas, on basis of existing ratio, to be devoted exclusively to the appellee.)

The actual investment employed in the appellee's gas business, including the investment of other companies devoted to the service of appellee's consumers, would be augmented by—

The present cost (June 1, 1923) of constructing 67,000 M. cu. ft. of additional daily coal and water-gas capacity at Astoria, on basis of ratio of coal and water-gas capacity now existing, exclusive of land and working capital (67,000 M. cu. ft. @ $423.09 per M.)		$28,347,030.00
Add estimated cost of additional transfer mains as testified to by Mr. Woods (R. 1956)		6,000,000.00
Add excess of the company's investment in its 48 inch connecting main which would have to be retained for its own use on the above basis over the investment actually retained during 1923—		
On basis of above 100 per cent.	$885,956.22	
1923 actual 56.44 per cent.	500,085.98	385,870.24
Total additions to "rate base"		$34,732,900.24
Deduct investment in that portion of the appellee's land in Manhattan which would be sold and plants which would be dismantled:		
11th Street	$3,289,786.18	
21st Street	4,740,200.00	
99th Street	1,731,310.00	
Total		$9,761,296.18
Net addition to "rate base"		$24,971,604.06

The annual carrying charges on this net additional investment, including return, taxes, insurance and retirement expense and maintenance, would be as follows:

Return at 8 per cent.	$ 1,997,728.32
Taxes other than Federal income=2½ per cent. of investment	624,290.10
Federal income taxes (at 12½ per cent. per annum on return)	285,389.76
Insurance and retirement expense=½ per cent. of investment	124,858.02
Maintenance=1 per cent. on mains and tunnels	63,858.70
Total annual carrying charges	$ 3,096,124.90
Total annual carrying charges per M. cu. ft. of gas sold during 1923	12.87 cents
Adding to the above the annual cost per M. cu. ft. sold to amortize $7,210,834.18 of plant (exclusive of land) over a period of ten years (exclusive of any interest) $721,083.42 per annum	3.00 "
And estimated additional pumping expense of	1.25 "
Gives a total addition to present cost, per M. cu. ft. of gas sold, of	17.12 "

(1923 sales—24,057,694,200 cubic feet)

(3) Are Astoria production costs a fair criterion of the necessary production cost of the gas required by the appellee?

As to appellant's *third* contention above, it must be said that only fair test of the cost of production of gas required by the appellee is the average cost of all the gas

sold by the appellee. The plants are all operated as a unit, and the operations are shaped for economy in the total production and not at particular plants. The Court below could not in fairness have allowed the appellee only the operating costs found in the plant (Astoria) which has the lowest unit production cost but *a proportionately higher quantum of property,* and then limit the return to the aggregate value of all the plants as they stand, including therein plants without automatic machinery and waste heat boilers, etc., in which the cost of production may be slightly higher and the amount of the investment slightly lower.

To do that would be to surcharge the appellee with the economies in operating expenses from labor-saving machinery (upon the assumption, in dealing with operating expenses, that all plants are so equipped), without allowing in the "rate base" the necessary investment to enable such economies. The result as to the Manhattan plants would be to cut down their operating expenses upon the assumption that they were equipped with all automatic mechanical devices, and to deny them a return on the assumed equipment necessary for the lower operating costs. Mr. Woods demonstrated this clearly in his Exhibit No. 1035 (R. 1966-1967; 2845-2849).

The appellant's proposal was rejected by the present Master, with the approval of this Court, in the 1922 case of the *Brooklyn Union Gas Company* v. *Newton* (258 U. S. 604). The contention in behalf of the appellant Attorney-General (which was not joined in by the defendant Public Service Commission for the very obvious reason that when the Commission itself fixed the rates for the appellee on August 30, 1922, it followed no such method), was held by the Special Master in this case to be unsound and without merit (R. 128-129).

Further deductions claimed by appellant from distribution and other general expenses

The Attorney-General contends that the cost of distribution of gas (exclusive of taxes and renewals and replacements) should have been found by the Court below at 26.24 cents per thousand cubic feet of gas sold (Brief, page 55). The Court below found the cost of distribution to be at least 27.61 cents per thousand cubic feet for 1923, after deducting from the appellee's 1923 distribution expenses $280,705.10 in addition to the return on investment in distribution facilities, actually paid by the appellee but excluded by him from operating expenses (R. 123).

Nevertheless, the Attorney-General contends that further deductions should have been made from the appellee's actual distribution expenses (Brief, page 50).

Before discussing the specific items, we may refer to the appellant's claim that the appellee's distribution expenses are "out of line" with those of the two Brooklyn companies before this Court. The facts are:

(*cents per thousand cubic feet of gas sold*)

	Appellee (excluding all return): Finding No. 64	System gas companies: Finding No. 67	Brooklyn Union Gas Company: Finding No. 185	Kings County Ltg. Company: Findings Nos. 24, 25 and 29
Cost of production	50.29	50.22	54.60	49.73
Cost of distribution, etc.	27.61	27.77	27.72	26.98
Taxes	10.02	10.53	8.63	11.67
Retirement expense	3.50	3.50	1.50	1.50
Total cost	91.42	92.02	92.45	89.88
Less miscellaneous operating revenue	8.48	9.39	2.24	4.57
Net operating cost	82.94	82.63	90.21	85.31

The *gross* distribution expenses of the above companies align as follows:

	Cents per M. cu. ft.
Appellee	27.61
System companies	27.77
Brooklyn Union	27.72
Kings County	26.98

The foregoing does not indicate any disparity, even *prima facie*. The further fact, however, is that the appellee did a considerable business, at its branch offices and by field representatives, in the rental of appliances and kindred activities, from which it derived a substantial revenue, but on account of which it incurs distribution expenses. The two Brooklyn companies do not do such an appliance rental business, and they do not receive a similar miscellaneous operating revenue. Deducting this miscellaneous revenue to get the fair *net* distribution cost, we have:

	Cents per M. cu. ft.
Appellee	19.13
System companies	18.38
Brooklyn Union	25.48
Kings County	22.41

As to the further deductions urged by the appellant, in respect of the items of general office salaries and supplies and expenses, general law expense, and insurance, he is merely repeating his contentions in the prior suit, without regard to their support in the present record or their relevancy in this case. For example, the matter of the various inter-company charges and the bases of payments for services, etc., were fully covered in this record, as shown under Points Fifteen and Sixteen. There is no warrant for such

deductions in the present record. The Master considered carefully the facts as proven and reached a conclusion adverse to the appellant's claims (Fdg. No. 61; R. 179-180), and his findings were confirmed by the District Court.

On page 51 of his brief, appellant refers to the appellee's *new* preferred stock department, as representing an "abnormal expense." All of the costs of *establishing* this new department and in conjunction with the issuance of this stock are shown by the appellee's books in evidence (Exs. Nos. 689-724) to have been *capitalized*, as the Uniform System of Accounts requires (Ex. No. 253). The item objected to as "abnormal" is only the *annual* expense of maintaining the department. This preferred stock was sold only to, and may be owned only by, the employees and consumers, and the expenses of this department are in the interest of advantageous relations with those two groups.

The "moderate" amount of the uncollectible bills (R. 862) should not be eliminated, under the familiar decisions. Directors' fees of the appellee's board are not for the benefit of other companies, which have their own boards of directors.

Cost of taxes

The Master and Court have eliminated from operating expenses a number of the taxes actually assessed against the appellee, and the appellant is unable to suggest a *further* reduction in the allowance for taxes, except to the extent of 0.62 cents (Brief, p. 55). This would enable the appellant to reduce the allowance for taxes from 10.28 cents, the amount actually assessed, to 9.40 cents, which is the figure used in the appellant's table.

SUMMARY AS TO 1923 COST OF TAXES

			Amount	Cents per M. cu. ft.
Taxes per Exhibit No. 888 (R. 2800)			$2,474,040.42	10.28
Taxes deducted by Master (R. 123; see, also, Point Twenty-three):				
Gross earnings tax (part) (R. 778, 871, *post*)			12,856.63	.05
Excess dividends tax (R. 870)			48,805.41	.20
One-third of real estate tax on land at Kingsbridge holder station			1,826.66	.01
Total deductions			$ 63,488.70	.26
Taxes allowed by Master and Court (Finding No. 110; R. 200)			$2,410,551.72	10.02
Further deductions claimed by appellant:				
Real Estate Taxes on 14th & 42nd St. plants:				
14th	982 — 13	(Exhibit No. 818)	$ 10,521.60	
	988 — 1		42,264.50	.25
	991 — 1		4,959.40	
	991 — 47		1,835.80	
42nd	1089 — 1		75,350.00	
	1107 — 7		11,919.00	.37
	1090 — 23		2,877.00	
Total			$ 149,727.30	.62
Cost of taxes as claimed by appellant			$2,260,824.42	9.40

The $149,727.30 of real estate taxes (R. 1970) on the 14th and 42nd Street plants (Ex. No. 817) should follow the findings as to the property itself. The Master and District Court found these stations to be used and useful (R. 92-93), and there is no warrant for the exclusion of these actual taxes. This subject is discussed under Point Thirteen, *post,* to which we refer.

A particularly vicious mis-statement is made by the appellant (Brief, page 54) that "the Court below has included taxes on these plants even for the year 1924 when the evidence is that the land was sold and the plants scrapped in October, 1923." This is absolutely untrue (R. 1970).

POINT FOUR

ADDITIONAL COST OF 650 B.T.U. GAS

Appellant's "estimate" (Brief, page 55) fails to take into account or give effect to is the *increased* cost of supplying gas of not less than 650 B.t.u. per cubic foot, as compared with the cost of gas of the quality actually supplied. More gas-oil would be required, per thousand cubic feet, in producing gas of this higher calorific content (R. 1122).

Appellant's brief nowhere contends or suggests that a $1.00 rate could be non-confiscatory, if the appellee were compelled to furnish gas of not less than 650 B.t.u. Unless the 650 B.t.u. provision can be severed from the $1.00 rate and that part of the statute held unconstitutional, the appellant makes no apparent effort to defend the $1.00 rate.

Appellee's testimony that there would be such an additional cost of gas of the statutory standard was and is undisputed (R. 1122-1124, 1902), as was also its estimate of the amount of such additional cost (R. 1124-1129).

Mr. Woods presented detailed calculations (R. 1124-1129), showing the increase in the cost of furnishing 650 B.t.u. gas over the cost of the quality actually supplied by the appellee under the authorization of the Commission's order of August 30, 1922. His estimate of this additional cost at 5.02 cents as of May 1, 1924, was characterized by Mr. Little as being too low (R. 1902) and is not now challenged by the appellant (Brief, page 141).

According to these detailed computations (R. 1129), based on both the appellee's actual experience and its experimentations (R. 1164-1165), the manufacture and distribution by the appellee, during the year 1923, of gas of a thermal content of not less than 650 British thermal units, amounted to at least 4.95 cents per thousand cubic feet of

gas *made,* or at least 5.19 cents, per thousand cubic feet of gas *sold,* more than the cost of production and distribution of the gas actually made and supplied by the appellee to its consumers (R. 126, 204, 205).

These increased costs have to be added to the appellee's actual operating costs, in order to ascertain the operating costs by which the statutory rate and standard must be tested. This the appellant's brief does not do, in any of its "computations" to sustain the statute.

The foregoing discusses only the *increased cost* of 650 B.t.u. gas, if it could be and were supplied. The dangers and difficulties inherent in any attempt to comply with the statutory standard are shown alike by the testimony of the appellant's and the appellee's witnesses (Mr. Woods: R. 1113, *et seq.;* Mr. Rasch: R. 889, *et seq.;* Mr. Little: R. 1883-1885; report of defendant Commission: Exhibit No. 212, R. 2217), and are discussed in the separate brief filed in behalf of the appellee.

POINT FIVE

CONSERVATIVE BASES OF MASTER'S FINDINGS AS TO AMOUNT AND VALUE OF PROPERTY

There was no challenge by the appellant, on the trial, as to the amount of the appellee's physical property, or the correctness of the submitted inventories, or as to the used and useful character of any of the property except the 14th and 42nd Street plants. The correctness of the appellee's claims in all of these respects is now admitted by the stipulations (see pages 5 to 8, *ante*), with the sole exception above noted.

There was no contradicting testimony, by any witness for the defendants, as to the reasonableness and correctness of the appellee's proofs of the present replacement cost (as of June 1, 1923, and subsequent dates) of any of the appellee's physical property, except as to the market value of the land and the replacement cost of the Astoria tunnel, a portion of which is used in serving the appellee's consumers. Mr. John Vipond Davies, the world's foremost tunnel engineer, appraised the Astoria tunnel, exclusive of head-houses and gas-main equipment, at $8,750,676, and the City's engineer appraised the tunnel at $2,846,972 less (R. 97). Between the higher appraisal of the land for the appellee (by Mr. Huntley) and the higher appraisal of the land for the appellant (by Mr. Boylan) there was $3,537,395 of difference in the value of the total land devoted to appellee's use (see p. 109, *post*). Thus only as to $6,384,367 out of a total of $216,153,025.31, proved by the appellee as the reproduction cost of its property, was there any conflict of testimony tendered by the defendants.

By stipulations since the trial, as shown on pages 4 to 8, *ante*, the appellant has definitely withdrawn any contest by him as to the reasonableness and correctness of the appellee's estimates of the cost of the labor, material, etc., entering into its physical property, with the exception of land, mains and services, and the 14th and 42nd Street plants.

Nevertheless, the $216,153,025.31 of reproduction value thus clearly proved by the appellee (Exhibit No. 890; R. 2800, folio 4107; plus going value was cut to $162,559,-692.48 by the Special Master (R. 191) in reaching and finding *his reproduction value*—a reduction of $53,593,332.83, with substantially no evidence warranting a reduction at all.

Nor was this all: Having cut from $216,153,025.31 to $162,559,692.48 the "*reproduction value,*" the Special Master did not find *even this sum* as the "rate base" for the purpose of testing the rate (R. 202). On the contrary, his "present value" of $134,101,738.77 was and is $28,457,-953.71 less than *his* "reproduction value" and $82,051,-286.54 less than the *actual reproduction value* proved by the appellee and in no way disputed by the defendants' proofs except to the very limited extent above shown.

Comparison between the facts proved by appellee as to reproduction cost and present value of the property, used by the appellee, and the reproduction cost and present value found by the Master and Court

For convenience, we insert at this point tables of comparison between the facts proved by the appellee and the minimum sums allowed by the Master and Court indicating the extent to which all possible doubts have been resolved against the appellee and also the conservativeness of the Master and Court in their findings:

Summary of the evidence and the findings as to the property used and useful in the service of the appellee's consumers as of June 1, 1923

	Reproduction value proved by appellee	Reproduction value found by the Master and Court	"Present value" found by the Master and Court
Property owned by the Consolidated Gas Company and used and useful in the service of its consumers	$168,644,197.83	$122,898,715.11	$99,303,434.18
Property owned by the Astoria Company and used in the service of Consolidated consumers	37,539,809.82	31,041,333.66	28,426,877.06
Property owned by the East River Company and used in the service of Consolidated consumers	9,581,394.96	8,266,253.52	6,146,427.53
Property owned by the Standard Company and used in the service of Consolidated consumers	387,622.70	353,390.19	225,000.00
Total	$216,153,025.31	$162,559,692.48	$134,101,738.77

In order to enable the Court to see just what items were cut, and in what amounts and percentages, we present the following tables, which show that the Master reduced the appellee's proofs no less than 37.96 per cent.:

Reproduction Cost and Present Value of All Property Devoted to Service of Appellee's Consumers as of June 1, 1923

COMPARISON BETWEEN THE REPRODUCTION COST PROVED BY THE APPELLEE (TAKING THE LAND AS APPRAISED BY ROBERT HUNTLEY) AND THE PRESENT VALUE FOUND BY THE MASTER

	Proved by the Appellee[1]	*Found by the Master and Court*[2]	*Reductions made by the Master and Court*	
			Amount	*Per Cent.*
Land	$17,928,599.08	$16,703,208.53	*$ 1,225,390.55*	*6.83*
Buildings	13,654,909.13	12,024,616.50	*1,630,292.63*	*11.94*
Manufacturing plants, holder stations and miscellaneous locations	32,737,103.66	31,651,592.46	*1,085,511.20*	*3.31*
Mains	36,725,904.91	26,476,778 87	*10,249,126.04*	*27.91*
Services	5,557,284.00	3,000,000.00	*2,557,284.00*	*46.02*
Tunnels	5,443,710.53	4,878,869.94	*564,840.59*	*10.38*
Meters and gas appliances	13,077,490.00	11,500,000.00	*1,577,490.00*	*12.06*
General equipment	916,686.16	916,686.16	..	..
Tools and implements	317,355.47	317,355.00	.47	..
Laboratory equipment	23,905.00	23,905.00	..	..
Total "bare bones" of physical property	$126,382,947.94	$107,493,012.46	*$18,889,935.48*	*14.95*
Undistributed structural costs	47,366,547.13	3,927,726.31	*43,438,820.82*	*91.71*
Franchises and rights (212 U. S. 19)	7,781,000.00	7,781,000.00	..	..
Working capital	9,622,530.24	5,900,000.00	*3,722,530.24*	*38.69*
Going value	25,000,000.00	9,000,000.00	*16,000,000.00*	*64.00*
Total for all the property used in serving appellee's consumers	$216,153,025.31	$134,101,738.77	*$82,051,286.54*	*37.96*

[1] Exhibit No. 890X.
[2] Master's Finding No. 102.

Some of these reductions were as to properties on which there was and is no conflict of testimony as to the inventories, the usefulness of the property, or its reproduction cost, are significant: Mains were cut 27.91 per cent. and services 46.02 per cent. Meters and gas appliances were cut 12.06 per cent., with no issue presented by the proofs at all. Undistributed structural costs were cut 91.71 per cent. from the uncontradicted estimates, down to a mere 3.65 per cent. of the "bare bones" tangibles, contrary to the decision of this Court in the *Ohio Utilities Company* case and despite the repeated rulings of the Special Statutory Courts in other local gas-rate cases upon similar testimony by the same witnesses, as shown under Point Twenty, *post*. The "bare bones" appraisal of buildings was cut 11.94 per cent., although the appellant has now stipulated that both the inventories and the prices were correct, for the "bare-bones" cost of the buildings.

If this Court should wish to analyze further as to the reductions made by the Master and Court, the following table will give the details:

Details of figures shown in above summaries, grouped by classes of property used and useful in the service of the appellee's consumers as of June 1, 1923.

Property owned by the appellee Consolidated Gas Company:

	Reproduction value proved by appellee	Reproduction value found by the Master and Court	"Present value" found by the Master and Court
Land	$13,959,150.00	$13,460,000.00	$13,460,000.00
Buildings	8,937,610.00	8,849,297.20	8,000,000.00
Manufacturing plants and holder stations	18,198,605.00	17,652,197.94	16,000,000.00
Mains	37,075,233.00	27,450,000.00	27,000,000.00
Services	5,557,284.00	4,350,000.00	3,000,000.00
Meters and gas appliances	13,077,490.00	12,250,000.00	11,500,000.00
General equipment	831,523.00	831,523.00	831,523.00
Tools and implements	202,363.00	202,363.00	202,363.00
Laboratory equipment	23,905.00	23,905.00	23,905.00
Working capital	6,900,000.00	3,500,000.00	3,500,000.00
Franchises	7,781,000.00	7,781,000.00	7,781,000.00
Undistributed structural costs	34,890,088.00	21,323,397.90	2,248,319.61
Going value	25,000,000.00	9,000,000.00	9,000,000.00
Total	$172,434,251.00	$126,673,684.04	$102,547,110.61
Less portion of appellee's property used by other companies (R. 187, 200)	3,790,053.17	3,243,676.43	3,243,676.43
Less amount necessary to put property in condition as if new (R. 65, 66)	.....	531,292.50	.....
Total	$168,644,197.83	$122,898,715.11	$99,303,434.18

Portion of property of The Astoria Company used by appellee:

	Reproduction value proved by appellee	Reproduction value found by the Master and Court	"Present value" found by the Master and Court
Land	$4,038,990.53	$3,314,373.94	$3,277,297.44
Buildings	4,692,626.80	4,692,626.82	4,000,000.00
Manufacturing plants and holders	14,916,794.20	14,916,794.20	16,000,000.00
Concrete bulkhead	141,092.46	141,092.46	141,092.46
Furniture and fixtures	41,279.17	41,279.17	41,279.17
General equipment	43,883.99	43,883.99	43,883.99
Tools and implements	114,992.47	114,992.47	114,992.00
Working capital	2,722,530.24	2,400,000.00	2,400,000.00
Undistributed costs	10,827,619.96	5,844,682.80	2,408,332.00
Total	$37,539,809.82	$31,509,725.85	$28,426,877.06
Less amount necessary to put property in condition as if new (R. 67)	.....	468,392.19	.....
Total	$37,539,809.82	$31,041,333.66	$28,426,877.06

Portion of property of The East River Gas Company used by appellee:

	Reproduction value proved by appellee	Reproduction value found by the Master and Court	"Present value" found by the Master and Court
Astoria Tunnel			
Land	$6,479.99	$4,459.23	$4,459.23
Head houses	74,406.42	74,406.42	74,406.42
Tunnel	4,939,398.00	4,374,557.41	4,374,557.41
Mains and equipment	633,176.83	633,114.74	500,000.00
Total	$5,653,461.24	$5,086,537.80	$4,953,423.06
Ravenswood Tunnel			
Land	$39,145.23	$29,451.86	$29,451.86
Head houses	34,240.08	34,240.08	34,240.08
Tunnel	504,312.53	504,312.53	504,312.53
Mains and equipment	110,151.36	110,123.14	100,000.00
Total	$687,849.20	$678,127.61	$668,004.47
48-inch and 60-inch mains	$600,846.31	$600,846.31	$525,000.00
Undistributed costs	2,639,238.21	1,900,741.80	.....
Total	$9,581,394.96	$8,266,253.52	$6,146,427.53

Portion of property of The Standard Gas Light Company used by appellee:

	Reproduction value proved by appellee	Reproduction value found by the Master and Court	"Present value" found by the Master and Court
48-inch Harlem River main	$190,692.32	$190,692.32	$150,000.00
62nd Street boiler and governor house	85,562.66	85,146.37	75,000.00
Undistributed costs	111,367.72	77,551.50	.....
Total	$387,622.70	$353,390.19	$225,000.00

The figures stated above as the reproduction values proved by the appellee, are based upon land values testified to by Mr. Robert Huntley (R. 917-920), which are set forth in complete detail in Plaintiff's Exhibit No. 890, Schedule X (R. 2800, folio 4112). That exhibit shows similarly in its Schedule Y the reproduction cost of the property used by the appellee, if the values of land as appraised by Mr. F. K. Stevens were adopted and used (R. 2800, folio 4109). Mr. Stevens' figures totalled $1,039,425.69 less than Mr. Huntley's, as shown in the tables following.

The Master's conservative valuations of the land used by the appellee

Four witnesses testified as to the value of the land (unimproved). Messrs. Robert Huntley and Francis K. Stevens testified on behalf of the appellee, and Messrs. Martin McHale and John J. Boylan in behalf of the appellant.

As shown under Point Eighteen, *post*, there was no question of the *high* qualifications of the appellee's witnesses, no doubt as to their *superior* qualifications and experience, and at least some doubt as to the qualifications of the appellant's witnesses to testify reliably as to these parcels at all. The appraisals of either of the witnesses of the appellant barely equals the assessed valuations of the appellee's property (R. 1762; also see following tables).

The following tables will show the conservative methods used by the Master, in that *he in practically every instance took the lower of the two figures presented in behalf of the appellee*, and frequently adopted his own figure, lower than any proved by the appellee:

SUMMARY OF LAND (UNIMPROVED)

As of June 1, 1923

	Huntley Appraisal	Stevens Appraisal	Special Master's Finding	Assessed Value 1924	McHale Appraisal	Boylan Appraisal
Consolidated Co.	$14,282,055	$13,923,305	$13,775,180	$11,536,000	$11,420,826	$11,532,537
Astoria Co. (Total land).....	5,291,000	4,406,100	4,350,000	3,472,300	4,173,320	4,173,320
Standard Co.	52,000	52,000	52,000	30,000	45,031	47,080
East River Co.	80,830	64,400	62,000	52,785	58,458	59,554
Total as of June 1, 1923.....	$19,653,885	$18,393,805	$18,239,180	$15,061,085	$15,652,604	$15,765,411

Land Acquired Since June 1, 1923, and Now Used and Useful

		Huntley Appraisal	Stevens Appraisal	Special Master's Finding	Assessed Value 1924	McHale Appraisal	Boylan Appraisal
Consolidated Company Hunts Point	Block 2770, 2775E, 2775F, 2775G, 2775H, 2776, 2777J, 2778, 2780, 2781	$2,700,000	$2,350,000	$500,000****	$1,532,000	$2,160,000	$2,160,000

****Amount included by Special Master applicable to land at Hunts Point. The actual purchase price of the Hunts Point site, purchased since June 1, 1923, is included in the net additions during the period from June 1, 1923, to December 31, 1923 (Plaintiff's Exhibit No. 883), in the sum of $2,265,103.00, and the appellee has included this parcel at its actual cost in the various exhibits presented and proven showing the present value of its property used in its gas business. The appraisals of this parcel, above stated, establish the fact that this land was reasonably worth more at the time of its purchase than the price paid for it, and that the amount at which it is included in the "rate base" is a moderate and conservative measure of its value.

APPRAISALS BY PARCELS

Land Owned by the Appellee and Used and Useful in Its Gas Business as of June 1, 1923[1]

Block	Lot No.	Huntley Appraisal	[2]Stevens Appraisal	Special Master's Finding	Assessed Value 1924	McHale Appraisal	Boylan Appraisal
239	1, 5	$ 181,500	$ 175,000	$ 175,000	$ 145,000	$ 148,500	$ 160,135
368	1	487,000	465,000	465,000	375,000	435,650	451,269
369	1, 10, 11, 12, 13, 14, 15	757,000	671,000	650,000	408,000	[3]566,457	[3]573,409
382	22	345,000	357,000	351,875	300,000	302,449	314,382
989	1	227,000	210,000	210,000	169,000	184,002	192,183
982	13	437,500	[2]437,500	437,500	342,000	321,371	333,818
988	1	680,000	[2]680,000	680,000	415,000	464,860	485,350
991	1	361,755	[2]361,755 }	429,555	{ 180,000	263,961	274,170
991	47	67,800	[2] 67,800 {		{ 67,000	45,220	45,220
870	60, 47	522,500	510,000	510,000	431,000	425,480	447,700
985	7, 19, 20	229,000	216,000	216,000	216,000	228,800	197,340
951	35	62,000	65,000	65,000	53,000	53,434	53,434
952	7, 29, 30, 35	372,000	396,000	370,000	370,500	358,041	346,318
953	1	565,000	552,000	552,000	550,000	461,340	480,833
978	5, 6	475,000	491,000	475,000	460,000	418,148	420,628
979	1, 27	582,000	571,000	571,000	484,000	523,461	523,543
987	37	176,000	133,000	133,000	105,000	130,880	130,880
1090	23	132,000	135,000	135,000	100,000	118,800	119,299
1089)	1)	2,030,000	[2]2,000,000	2,000,000	1,550,000	[4]1,289,725	[4]1,276,456
1107)	7)						
1092	16	289,000	302,000	302,000	305,000	290,115	290,115
1093	9	398,000	351,000	351,000	315,000	345,642	346,363
1028	38	660,000	660,000	660,000	530,000	531,520	531,520
1457	6	180,000	179,000	179,000	145,000	170,118	170,746
1157	1	1,076,000	1,057,000	1,057,000	950,000	858,880	878,658
1177	21	398,000	440,000	440,000	320,000	337,168	345,292

Block	Lot No.	Huntley Appraisal	[2]Stevens Appraisal	Special Master's Finding	Assessed Value 1924	McHale Appraisal	Boylan Appraisal
1670	1	567,000	464,000	464,000	542,500	386,100	386,100
1692	1	285,000	260,000	260,000	240,000	222,225	216,425
1682	11, 8	369,000	368,000	368,000	422,500	330,000	330,000
1683	18	88,000	83,000	83,000	80,000	77,000	77,961
1704	5	368,000	362,500	362,500	355,000	329,333	332,571
1712	2	87,000	78,250	78,250	52,500	72,006	73,569
1642	33	53,000	46,500	46,500	52,000	48,400	48,400
1998	50, 53, 54, 55, 56	77,000	80,000	80,000	50,000	61,600	60,704
1999	1	240,000	227,000	227,000	165,000	200,200	197,815
2108	23	22,000	21,000	21,000	21,000	19,800	19,800
2497	132	200,000	200,000	200,000	70,000	200,640	200,640
3236	1	265,000	250,000	170,000	200,000	199,500	199,500
Total		$14,282,055	$13,923,305	$13,775,180	$11,536,000	$11,420,826	$11,532,537
Less portion rented of Block 870, Lots 47, 60 (General Office Property), 61.8%		322,905	315,180	315,180	266,358	262,946	276,678
Land owned, used in the gas business, as of June 1, 1923		$13,959,150	$13,608,125	$13,460,000	$11,269,642	$11,157,820	$11,255,857

[1] Land acquired subsequently to June 1, 1923, does not appear as testified to by Mr. Huntley or Mr. Stevens. As to such parcels, the purchase price reasonably paid, between June 1, 1923, and the close of testimony, is shown in the Brundage-Davidson exhibits from the books, and such purchase price is submitted as present value.

[2] Mr. Stevens did not testify as to the parcels comprised within the 14th and 42nd Street plants; therefore Mr. Huntley's figures are shown for those parcels, as indicated for a comparative total.

[3] These figures do not include the valuation of the bed of alleged Tompkins Street, valued by Mr. McHale at $398,030 and by Mr. Boylan at $411,108.

[4] This figure does not include the valuation of the bed of projected Twelfth Avenue separately valued by Mr. McHale and by Mr. Boylan.

Land Owned by The Astoria Light, Heat and Power Company

Block	Lot No.	Huntley Appraisal	Stevens Appraisal	Special Master's Finding	Assessed Value 1924	McHale Appraisal	Boylan Appraisal
849	1	$ 34,000	$ 24,000		$ 25,000	$ 23,680	$ 23,680
850	1	4,700,000	4,000,000		3,000,000	3,752,040	3,752,040
859	1	53,000	36,400		44,000	32,000	32,000
860	1	50,000	34,300		44,000	73,600	73,600
870	1	50,000	34,300	(Details not set	42,000		
871	1	54,000	36,400	forth by	42,500	32,000	32,000
881	1	54,000	36,400	Special Master)	44,500	32,000	32,000
882	1	84,000	37,300		45,000	48,000	48,000
893	1	80,000	50,000		51,800		
894	1	108,000	85,000		91,000	180,000	180,000
895	1	24,000	32,000		42,500		
Total		$5,291,000	$4,406,100	$4,350,000	$3,472,300	$4,173,320	$4,173,320

Land Owned by The Standard Gas Light Company

Block	Lot No.	Huntley Appraisal	Stevens Appraisal	Special Master's Finding	Assessed Value 1924	McHale Appraisal	Boylan Appraisal
1475	1	$ 52,000	$ 52,000	$ 52,000	$ 30,000	$ 45,031	$ 47,080

Land Owned by The East River Gas Company of Long Island City (Tunnel Land)

Block	Lot No.	Huntley Appraisal	Stevens Appraisal	Special Master's Finding	Assessed Value 1924	McHale Appraisal	Boylan Appraisal
357	1 (Part)	$ 5,000	$ 2,500		$ 3,285***	$ 2,000	$ 2,000
850	2	1,850	900	(Details not set	1,000	761	837
1482	27	64,350	54,000	forth by	40,000	50,697	51,902
2583	450**	9,630	7,000	Special Master)	8,500	5,000	4,815
Total		$ 80,830	$ 64,400	$ 62,000	$ 52,785	$ 58,458	$ 59,554

**—Original lot.
***—Assessment apportioned.

The rule of present value hardly involved in this case

Upon the present record, it is unnecessary to discuss or determine in this case whether present value should closely approximate present replacement cost in the absence of proof of special circumstances and factors affecting the value of the property and leading to some other conclusion. We believe that upon the present record and under the most recent decisions, the Special Master should have found that the sums produced by applying the admittedly correct and reasonable costs of labor, materials, etc., to the property shown by the undisputed inventories, constitute the present value of the property, including working capital, undistributed structural costs, etc., as proved in this case.

The Special Master, however, did not do this or anything like it.

On pages 103 and 104, *ante*, we have shown that he slashed and cut the *proved* reproduction value from $216,153,025.31 down to $162,559,692.48, which he found as *his* reproduction value of the property, and then found his "present value" in a sum $28,457,953.71 less than his "reproduction value"—or $82,051,286.54 less than the *actual* reproduction cost as proved, and substantially undisputed, on the trial.

Economic reasons seem to us to compel that, in the absence of *proof* of special circumstances leading to a sound business judgment otherwise, present value should reflect fully the present rates of pay of labor and the present prices of materials. Unless this is done, it does not seem to us that value is found as of the time of the alleged confiscation.

Standard Oil Co. v. *Southern Pacific Co.*, 268 U. S. 146;

Consolidated Gas Co. v. *Newton*, 267 Fed. 231, 236; 258 U. S. 165;

State of Missouri ex rel. Southwestern Bell Telephone Co. v. *Public Service Commission of Missouri*, 262 U. S. 276;

Ohio Utilities Co. v. *Public Utilities Commission of Ohio*, 267 U. S. 359;

Brooks-Scanlon Corporation v. *United States*, 265 U. S. 106, 125;

Bluefield Water Works and Improvement Co. v. *Public Service Commission of West Virginia*, 262 U. S. 679;

Monroe Gas Light and Fuel Co. v. *Michigan Public Utilities Commission*, 292 Fed. 139; (Spec. Stat. Ct.); ruling reaffirmed on further hearing: 11 Fed. (2nd) 319;

Peoples' Gas and Electric Co. of Oswego v. *Public Service Commission*, 214 App. Div. (N. Y.) 108;

Van Wert Gas Light Co. v. *Public Utilities Commission of Ohio*, 299 Fed. 670;

Roanoke Waterworks Co. v. *Commonwealth of Virginia*, 124 S. E. 652 (Va.);

New York Telephone Co. v. *Prendergast*, 300 Fed. 822 (Spec. Stat. Ct.); S. C. on further hearing: 11 Fed. (2nd) 162;

Petersburg Gas Co. v. *Petersburg*, 132 Va. 82;

City of Erie v. *Public Service Commission*, 278 Pa. St. 512; 123 Atl. 471;

Citizens' Gas Co. of Hannibal v. *Public Service Commission of Missouri*, 8 Fed. (2nd), 632;

Elizabethtown Gas Light Co. v. *Board of Public Utility Commissioners of New Jersey*, 111 Atl. 729;

City of Fort Smith, Ark. v. *Southwestern Bell Telephone Co.*, 294 Fed. 102; —— U. S. ——.

The most accurate and reliable way of determining the value of any piece of property (for example, a parcel of land) is usually to sell it under as fair competitive conditions as possible. Even then the sale price obtained on a single offering may not always be *conclusive* as to the *value* of such property. The cost of obtaining an equal area in a closely similar location may, or may not, indicate that the single sale price was not wholly representative.

But the value of a piece of property has often to be ascertained without actually offering it for sale. That is a common matter, in judicial proceedings and in business transactions.

Under such circumstances, the best measure of value is to obtain experienced and reliable judgment and opinion as to what such a piece of property would sell for, if offered for sale under fair competitive conditions. The prices obtained for other and somewhat similar properties become a part of the bases for such a reasoned opinion and experienced judgment. Such an opinion and judgment as to value must be based on sound factors and should not be arbitrary or capricious.

When the property has a structural character and is used for productive purposes, its value becomes the sum which purchasers desirous of obtaining such a property for such a purpose will pay for the existing structure or structures rather than undertake to build new ones. Testimony along the lines here being discussed was given by Mr. Woods, R. 1551-1553; Mr. Addicks, R. 1593-1594; Col. Miller, R. 1479-1480; Mr. Allison, R. 1369-1370.

The present cost to build such a property new, and the

present cost of making any restorations and replacements necessitated by its condition, become decisive factors in forming an opinion as to what purchasers would pay for the present property rather than to build new. The reproduction value is ascertainable from these factors.

The present value of a utility plant and system at any time of inquiry, is best ascertainable from its reproductive value, and is the sum which investors desiring to engage in that business in that territory will pay for the present plant, rather than build a new one.

Obviously such present value must be computed by applying to the inventoried property present rates of pay for labor and present prices of materials, because those wages and prices would determine the present cost to build such a property and so would determine the price obtainable by the present owners from those who are deciding whether to build rather than buy.

If the existing plant and property have been well maintained by repairs, renewals and replacements, as needed, and have sustained no loss of capacity or efficiency, the sum which such investors will pay for the existing project will equal, and in fact usually exceed, its present replacement cost, for the plant has "struck its gait," is a going, continuing concern, and has probably gained substantially in efficiency and capacity, from the time it started operations new (R. 1370).

A concrete instance illustrating the correctness of this rule

The foregoing has often been stated as a matter of sound theory, but doubt is sometimes expressed as to whether it works out in practice. An interesting incident

developed in connection with one of the gas-rate cases recently tried in New York City.

The present appellant called to the stand a gas engineer who has done a great deal of work for municipalities and quasi-public bodies, as well as for some industrial and utility concerns, over a period of years. On cross-examination, it developed that the witness sponsored by the present appellant had made an investigation and report as to the gas company involved in that case, prior to his employment by the Attorney-General. That report had been made by him in conjunction with a regular employee of his client, who was a purchaser of utility properties and securities, hitherto operating largely in the Middle West. This investor wished to know how much he could afford to pay for the stock of this company, which was closely held, and so he asked these two experts to investigate and let him know.

They made a joint report, originally in confidence, but its contents were divulged upon this hearing. The basis of their estimate of the sum which they advised their client he could prudently afford to pay for that small company was as follows: Land at market value; buildings, plant and equipment, mains and services, and other physical property, as inventoried and estimated on a current reproduction cost basis; undistributed costs added at 18 per cent. of the "bare bones" reproduction cost of the tangible property; going value added at 10 per cent. of the tangible property, etc.

In this way, this engineer and this expert "prospector" as to utility properties computed a figure, from which they deducted no depreciation, because they said the property was well-maintained and would take care of its own repairs and replacements. Then they advised their client

that he could afford to pay for the property, if he had to, a little more than the amount thus calculated, because of the semi-speculative possibilities of future development and earnings.

This was an interesting revelation of the way in which *present value* may be and is computed in actual business transactions.

Economic theory and business practice alike give the utmost weight to replacement cost in the ascertainment of present worth, unless special circumstances enter into the particular situation. Upon the facts above stated, however, we do not believe it can be said, as a matter of law or as a matter of fact, that the Master gave too much weight to present costs.

POINT SIX

APPELLANT'S $84,000,000 "RATE BASE" LESS THAN THE ADJUDICATED ORIGINAL COST

Appellant's Point I, which asserts that (Brief, page 31)

> "The rate base should not exceed $84,000,000, and in such a case as this should probably be fixed at a much lower figure"

is a specious but amazing compilation—a "house of cards" built on several others which have already been demolished. There is no pretence that any such "rate base" would represent or reflect the *present value* of the useful property. The whole effort is to create a diminutive "rate base" by prejudice, fallacy, and mis-statement.

Appellant begins by reliance on his erroneous mathematics as to the New York Mutual transaction. We show,

under Point Eleven, *post*, that the *correct* unit costs derived from that transaction confirm and fortify the present findings as to the appellee. Appellant continues by his assumption that because $3.60 is a fair unit figure to cover *some* elements of property in Brooklyn, he can stretch it to cover *all* elements of property, in Manhattan. His error in this respect we show on pages 162 and 163, *post*.

Appellant next repeats and relies upon his bad law, and worse mathematics, as to the appellee's rates and earnings during 1921 and 1922. We show conclusively, under Point Nine, *post*, that the appellee was not "free from all regulation" during any part of 1921 or 1922, but was subject to the most vigorous regulatory activity of the Commission at all times down to August 30, 1922. Appellant's inexplicable confusion on the law and the facts destroys altogether his argument on this point. The appellant's statements as to the appellee's 1921 net earnings are wrong, as shown on page 151, hereof, *post*, and the appellant's statement of the Master's report, at the bottom of page 32, is wrong. The reference to page 1112 is to the *Woods report*, and does not support a claim that the Master found that there should be included "the bulk of the other jointly-used facilities," etc. (Appellant's Brief, page 32). From this the appellant proceeds by assuming that he has shown his right to exclude from the "rate base" a large part of the Astoria plant, Astoria tunnel, and transmission mains through The Bronx to reach the appellee's consumers in upper Manhattan, together with both of the appellee's two coal-gas plants in Manhattan. The error of these assumptions we have demonstrated.

"Computing" a present value less than original cost

Having thus established (or assumed) the premises which we have commented upon above, appellant next proceeds (page 34) to put down his figure of $84,000,000 and to try to support it. Naturally, his only chance is to start with the appellee's *investment* and then decimate and reduce it. So he starts with the Special Master's finding of $98,891,804 (R. 199), as the *cost* of the property used by the appellee in serving its consumers.

Appellant does not mention the fact that, as shown under Point One, *ante*, this figure, aside from the amount of going value included therein, represents the investment findings by Judge Hand, affirmed by this Court, plus net additions from December 31, 1918, to June 1, 1923. Appellant does not mention that this was also the amount found by the defendant Commission as of June 30, 1922, plus net additions at actual cost (R. 42, 2355; see also Exs. Nos. 820-821; R. 2342, folios 3351-3391; R. 2343-2386). He does mention the fact that, *on the trial*, the defendants started their investment proofs with the date of Judge Hand's findings (R. 1783), and that, as shown under Point One, *ante*, there was no evidence offered to challenge or cast doubt upon the investment in the property used by the appellee as of that date. The only schedules offered by the defendants showed the net additions since December 31, 1918 (Defts'. Exs. Nos. 54-57, 74-77; R. 2980-2986, 3015-3020).

The amount of the investment was not, and could not have been, re-litigated on this trial. These findings were made and affirmed in litigation to which the Attorney-General and Commission as well as the appellee, were parties, and so are binding upon them, and upon the appellee, as to the amount of such *investment*.

New York & Richmond Gas Co. v. *Prendergast*, 10 Fed. (2nd), 167 (Spec. Stat. Ct.); and cases therein cited.

So the appellant ignores all this, and starts bravely out by asserting that the present Special Master's finding is not original or *ab-original* cost of construction, but original cost to the companies now devoting such property to the public service (Brief, page 34). In this connection, he makes the same arguments which he and his predecessors have addressed so many times to the Courts and Commissions, and which have been as often rejected. He asserts as the conclusion of the Gilbert Committee in 1886, the views uttered only by a *minority of one*, as his page reference shows, which views were rejected by the *majority* of the Committee, rejected by this Court in 1909, rejected again by this Court in 1922, decisively disposed of by the defendant Commission later in 1922, and hardly mentioned upon the trial of the present action. If anyone wishes to review the matter again, the facts are fully set out in the record of Case No. 257 (1921 Term) and are reviewed at pages 471 to 488, inclusive of the Appellee's Brief on the Facts in *Newton* v. *Consolidated Gas Company* (258 U. S. 165).

It would seem that, in fairness, there must sometime be an end to the appellant's effort to re-litigate and re-re-litigate, without any evidence before the Court on the subject, what happened before 1880 and what the Courts and Commissions have decided was and is the investment in this property. Nevertheless, the appellant predicates his whole computation (page 35) upon a fanciful and unsupported figure from fifty years ago, and by various deductions supported only by a *minority* report of a legislative committee of forty years ago, he works out an absurd pretense

of a "rate base" for 1923 and thereafter (page 56)—a decimated and unrecognizable *ab-original* cost of $63,640,565, sustained by no books, refuted by all the evidence, and twice rejected by this Court!

In the presence of so astounding a "method" of "reaching" a "rate base," it may be unseemly to cavil at mere errors of computation. For example: Appellant cites Exhibits Nos. 820 and 821 as authority for the amount of his first deduction, viz., $4,805,237 for the 14th and 42nd Street plants. Evidently this figure is as whimsical and elusive as the rest, because those exhibits show the total investment in land and plant as of June 1, 1923, at those two stations to be $3,640,809. The unsoundness of deducting all of the investment at those two stations, *on any theory,* we have shown under Point Thirteen, *post.* So the appellant deducts $1,200,000 more than the total book cost of these two stations at June 1, 1923!

Having "reached" by such devices this meager figure of $63,640,565, appellant's audacity fails him, and he asks, with a flourish of fairness,

> "How much should be added in recognition of present value?"

He concludes that *two* per cent. would be enough (Brief, p. 37), and that $84,000,000 is "*an ample figure, before deducting depreciation.*" In other words, appellant cuts an *actual, adjudicated investment* of $98,000,000 down to $63,000,000, and then "generously" restores it to $84,000,000, "in recognition of *present value,*" preliminarily to reducing it again to $63,000,000 or less, by deducting an equally arbitrary and unproved depreciation.

That such a "rate base" could not be accepted as *present value,* is shown by the facts and the decisions cited under Point Five, *ante.*

POINT SEVEN

APPELLANT'S CLAIM THAT RETURN OF LESS THAN SIX PER CENT. UPON LESS THAN ORIGINAL COST IS SUFFICIENT.

The fifth of the appellant's Statement of Points is as follows (R. 3075; also Brief, page 109).

> "The statute in question should not be declared unconstitutional unless the Court finds that the rate of return would have been less than six per cent."

The appellant's brief before this Court (Point VI, pages 109-117) argues that a statutory rate limitation is non-confiscatory unless it would yield *less than six per cent. upon a "rate base" indicated as less than original cost.*

The appellant's brief on this point proceeds wholly along the following lines:

> (1) It ignores the fact that no testimony was offered by anyone upon the trial to indicate that a return of less than eight per cent. could be sufficient.
>
> (2) It ignores practically all of the decisions on the subject, in utility cases, since 1917.
>
> (3) To hide or make up for this inability to offer proof or cite post-war decisions to sustain a rate below eight per cent., the appellant's brief cites and quotes at length from decisions rendered in pre-war years, *based upon the facts proved in those cases,* as far back as 1905.
>
> (4) From these pre-war determinations as to the cost of money in those years, the appellant argues that because the evidence was found to sustain a six

per cent. return as adequate in those years, the same conclusion should be reached as to post-war years, in spite of the fact that the uncontradicted evidence now shows that an eight per cent. return is needed and that the $1.00 rate would yield far less than six per cent.

(5) Most of all, however, the appellant seems to rely on a mass of mis-statements and failures to report business transactions reliably, which are not in this record and for which the appellant quotes no authority.

The findings upon the undisputed testimony below

The Special Master reviewed both the testimony and the economic considerations in detail (R. 138-140), and concluded (see also Finding No. 107; R. 203):

> "I find that eight per cent. is a rate customarily required in the locality to be earned on the present value of the property of a regulated public utility, and that the plaintiff is entitled to earn at least this amount."

The District Court overruled the appellant's exception to an eight per cent. return (R. 257), affirmed the Special Master's finding (R. 203), and said (R. 320):

> "It is also the Court's conclusion that, at the present time, a reasonable rate of return, according to well-recognized custom in a regulated business like this, is not less than eight per cent."

Under the decisions and the testimony, which we shall presently review, we believe that the rate of return required by a given utility, in order to attract capital and avoid

injustice to its investors, is a *question of fact*, to be determined from all of the relevant facts, in the exercise of a reasoned business judgment.

(A) The $1.00 rate would inevitably yield less than four per cent. upon any "rate base" that could be reached under any concept of valuation.

The appellant's brief argues that rates are confiscatory only if they yield less than six per cent. Even by this criterion, the statute here under review is condemned, as was shown in detail under Point Two, *ante*.

After all of the drastic deductions which were made from appellee's actual operating expenses and from the sums proved by the appellee as the present value of its property, the Special Master and the District Court found that the return which would have been yielded by a $1.00 rate and 650 B.t.u. standard was as follows (R. 134; 204-207):

Year	*Return upon Master's reproduction cost*	*Return upon adjudicated investment*	*Return upon Master's present value*
1923	1.73 per cent.	2.85 per cent.	2.10 per cent.
1924 (May 1st)	2.03 " "	3.34 " "	2.46 " "

The Commission's rate, fixed on August 30, 1922, of $1.15 for gas of not less than 537 B.t.u., was frankly expected by that body (R. 44), upon the basis of its investigations, to yield less than an adequate rate of return upon a "rate base" found in an amount equal to the actual investment (R. 42). After wages and prices had substantially advanced meanwhile, as shown under Point One, *ante* (see Exs. Nos. 1019-1022, inclusive; R. 2828, folio 4194-4197), the prescribing of a $1.00 rate for 650 B.t.u. gas, to

become effective on June 2, 1923, could hardly have been expected by the Legislature to yield any substantial return upon either original cost or present value.

(B) Statutory regulation of rates should not be permitted to reduce below eight per cent. the earnings of the private capital embarked in the appellee's business.

The gist of the appellant's argument seems to be (Brief, page 109, *et seq.*) that although the Special Master and District Court may have been warranted in finding that an eight per cent. return is required *for adequacy and reasonableness*, a much lower rate will be sufficient to escape confiscation. The decisions sustain no such distinction. The fact is that the National market for money, for industrial and public service enterprises, has become highly competitive, and the return must be such as to enable the utilities to secure in this market the new money necessary for their business; and *eight* per cent. has been widely recognized as the customary and required rate, the denial of which constitutes confiscation.

Bluefield Water Works and Improvement Co., v. *Public Service Commission*, 262 U. S. 679;
City of Fort Smith v. *Southwestern Bell Telephone Co.*, 294 Fed. 102;——U. S.——;
Michigan Public Utilities Commission v. *Michigan State Telephone Co.*, 228 Mich. 658; 200 N. W. 749;
Southwestern Bell Telephone Co. v. *Public Service Commission*, 262 U. S. 276;
Brush Electric Co. v. *Galveston*, 258 U. S. 388;
Lincoln Gas Co. v. *Lincoln*, 250 U. S. 256, 267;
New York and Richmond Gas Co. v. *Prendergast*, 10 Fed. (2nd), 167;

Matter of Adirondack Power and Light Corpn. v. *Public Service Comn.*, 211 App. Div. 272, 275;

New York and Queens Gas Co. v. *Prendergast*, 1 Fed. (2nd) 351; appeal dismissed by this Court: 268 U. S. 708;

Matter of Peoples' Gas and Electric Co. of Oswego v. *Public Service Commission*, 214 App. Div. 108;

Kings County Lighting Co. v. *Prendergast*, 7 Fed. (2nd) 192, 218;

Brooklyn Union Gas Co. v. *Prendergast*, 7 Fed. (2nd), 628, 654, 672;

Pacific Gas and Electric Co. v. *San Francisco*, 273 Fed. 937, 945;

Alton Water Co. v. *Commerce Commission*, 279 Fed. 869;

Newton v. *Consolidated Gas Co.*, 258 U. S. 165; affg. 267 Fed. 231;

Pioneer Telephone and Tel. Co. v. *Westenhaver*, 29 Okl. 429; 118 Pac. 354;

McAlester Gas and Coke Co. v. *Corporation Commission*, 227 Pac. 83;

Brooklyn Borough Gas Co. v. *Prendergast* (report of Special Master Burlingame; filed October 2, 1926; not yet officially reported);

Bronx Gas and Elect. Co. v. *Pub. Serv. Comn.*, 28 N. Y. St. Dept. Repts. 329; P. U. R. 1923A, 255; affd. 208 App. Div. 780; 208 App. Div. 806;

Indiana Bell Telephone Co. v. *Public Service Commission of Indiana*, 300 Fed. 190;

Newton v. *New York and Queens Gas Co.*, 269 Fed. 277; affd. 258 U. S. 178;

Columbus Gas Light Co. v. *Public Service Commission*, 193 Ind. 399; 140 N. E. 538;
Bronx Gas and Electric Co. v. *Prendergast*, 1 Fed. (2nd) 377.

In many of the State and Federal decisions above cited, the question was squarely presented whether a rate fixed by regulatory authority might be unreasonable and inadequate, but still not confiscatory. One of the most recent of these was the *City of Fort Smith* case, in which Judge Youmans discussed the question specifically (294 Fed. 102), and his ruling that an inadequate rate was of necessity confiscatory led to one of the exceptions principally briefed and argued in this Court, with the result that the decision of the District Court was affirmed (——— U. S. ———), upon the authority of the *Bluefield* case, *inter alia*.

The rule of the *Bluefield* case, *supra*, that the return which regulation may not deny to utility investors must be determined by the competitive conditions of the money market, so as to give them equality of treatment with investors in other undertakings of "corresponding risks and uncertainties," has been specifically laid down, by the appellate courts of New York, as the standard to guide and limit the regulatory power of that State, which includes its Legislature; and the Commission was reversed by the State Court, in a recent case, for allowing a return of no more than 7.1 per cent.

See New York cases, cited, *supra*.

Investors in a *new* public utility enterprise just completed and now being placed in operation, would be allowed to earn a return at the current cost of money upon the *present* cost to build or buy such a property. That would be

the rule and basis of their return, under any theory of valuation. To prevent injustice and discrimination against the investors in *existing* utility enterprises, they must be allowed to earn a like return upon a commensurate amount.

As the Special Master said in this case (R. 138):

> "If the investors were going to buy or build a property like that of the complainant, what amount would they feel that the property should earn in order to induce them to invest their money in the purchase or construction of such a property? Taking into consideration other classes of investment in this locality, with the comparative risks and return thereon, the rate of return generally required to secure proper credit for borrowing money and financing its operations, what should a utility company subject to state regulation be permitted to earn, in order that it might compete successfully with other businesses and be on a parity with them?"

Neither the Commission, or the utility, nor the Court, can control what rate of return is required to prevent *starving* the utility. *That is determined by the investor,* who will not put in his money where it may be discriminated against.

> *City of Elizabeth* v. *Board of Public Utility Commissioners of New Jersey,* 123 Atl. 358.

Although the market for money is now Nation-wide (*Pacific Gas and Electric Co.* v. *San Francisco,* 273 Fed. 937, 945) and particular local conditions may have only negative effect on the cost of money for a particular utility, it is the fact that during the past five years, more than a dozen of different Federal and State Judges, and nearly as many different Special Masters and State Referees, have examined carefully into the elaborate proofs as to the elements

determining the required rate of return, for public utility enterprises in and near New York City; and the determination in every case has been that at least eight per cent. upon present value is required, to escape confiscation. Many of these findings that eight per cent. was and is required, in order to escape confiscation, have been before this Court from time to time, and have not been disturbed, although City and State officials have made against them the arguments now renewed.

See, the various New York City cases above cited.

In a great number of decisions of recent years, including most of those above cited, a return of at least eight per cent. upon present value has been commonly held to be required, as the margin below which the regulatory power may not reduce the earnings of a utility. In a number of these cases, rates fixed by a Commission to yield seven per cent. or a little more have been held *confiscatory,* upon the facts and the expert opinions before the Courts in those cases.

The facts and the state of the record must control. As the Special Statutory Court said in *New York Telephone Company* v. *Prendergast* (300 Fed. 822, 826), where the Commission, as here, had allowed a seven per cent. return:

> "Admittedly it is and has been customary to allow as a reasonable rate of return for regulated businesses like this one, eight per cent. The justification for the custom is the habit of business men, and *a departure therefrom is not right because a Court or Commission prefers a lower rate. Reasons are wanted, and none are set forth in this record.* Under such circumstances there is no presumption of correctness attaching to the seven per cent. limit. The question always raised in rate cases is this: What rate of return, with due regard to certainty and se-

curity, will attract the intelligent investor? *It remains to be seen whether a departure from the present customary rate is warranted by modern conditions.*"

On November 24, 1925, in the *New York and Richmond Gas Company* case (10 Fed. [2nd], 167), the Special Statutory Court for the Eastern District of New York "approved the conclusion" of the Special Master therein and allowed a return of "*not less than eight per cent.*" The Statutory Court said:

> "In *Kings County Lighting Co.* v. *Prendergast* (*supra*) we approved a rate of return of not less than eight per cent. as a reasonable rate of annual return. We think that return on the property of the plaintiff would be a fair return on an investment and approve the conclusion of the Master as to it also."

On January 7, 1925, the New York Appellate Division for the Third Department, in the *Adirondack Power and Light Corporation* case, *supra*, held that a return of 7.1 per cent., allowed by the Commission, was inadequate.

In the *Kings County Lighting Company* case, before Manton, *C.J.*, and Campbell and Inch, *D.J.J.*, the Court overruled, on the facts before it, the present contentions of the present Attorney-General, saying:

> "* * * The Master has suggested, as a reasonable rate of return, not less than eight per cent. The Master had in mind that any rate lower than eight per cent. return would be confiscatory. * * * We approve the values arrived at by the Master and likewise the recommendation as to the rate of return below which, if a rate be fixed, would be confiscatory."

In each the *New York and Queens Gas Company* case, *The Bronx Gas and Electric Company* case, and the *Consolidated Gas Company* case, the Special Master made, and the District Court approved and adopted, findings that those gas companies were constitutionally entitled to earn an annual return of at least eight per cent. In the *New York and Queens Gas Company* case, this Court dismissed the appeal of the Attorney-General from those findings (268 U. S. 708), and in *The Bronx Gas and Electric Company* case, the Attorney-General has failed to prosecute an appeal from findings which include a determination that less than eight per cent. is confiscatory.

On March 10, 1926, the Special Statutory Court, on a further hearing in the *New York Telephone Company* case (11 Fed. [2nd], 162), ruled that an *eight* per cent. return on present value must still be allowed by regulatory authority; and the Special Master in the *Brooklyn Borough Gas Company* case adhered to this rule, as recently as October 2, 1926.

The "carefully considered opinion" of the Special Master in the *New York and Richmond Gas Company* case, approved by the Special Statutory Court as above quoted, said, in part:

> "The proofs in this case fully confirm the fact which is well within the common knowledge of residents of the Borough of Richmond, as to the urgent need that this plaintiff gas company shall be permitted to earn at all times an adequate rate of return, to the end that it may be able to attract freely the substantial quantities of new capital which are necessary for its normal growth. The welfare of this company and of the communities which it serves are shown to have been seriously

> prejudiced, at times, by the inability of the company to charge rates yielding net earnings which induce ready contributions of new capital for additions to plant and extensions of mains and facilities. Curtailment of the company's earnings below an adequate return would be no boon to this Richmond territory."

In the *Brooklyn Union Gas Company* case, Judge Campbell held:

> "On the question of the rate of return to which plaintiff is entitled, the only evidence given was that of the expert witness called by the plaintiff, who placed it at eight per cent., which was approved by the Master in his opinion.
>
> "The defendants, by way of argument only, because they called no witness, contend that the Act cannot be held to be confiscatory if plaintiff receives a return of six per cent.
>
> "Whatever force there might be to the argument of the defendants under some circumstances, it seems to be lost in the instant case when you consider that bonds issued by this plaintiff while under the regulation of the defendant Public Service Commission, and with its approval, bear interest at the rate of seven per cent. per annum, showing clearly that the lending public did not consider six per cent. as an adequate return."

In his opinion in the *New York and Queens Gas Company* case (1 Fed. [2nd], 351), confirmed by the District Court and appeal dismissed by this Court (268 U. S. 708), the Special Master said:

> "The plaintiff presented evidence by testimony of witnesses as to *the rate of return which a public utility company such as the plaintiff should earn on*

> *the amount required to build or buy its property. They placed this at ten per cent.* * * * I believe under the evidence and the decisions the plaintiff might properly claim a return of eight per cent. on the present value of its property used and useful for the benefit of the public."

Detailed demonstration that the payment by a utility company of a Federal income tax and the inclusion of its amount as a part of the operating expenses (*Galveston Electric Company* case, 258 U. S. 388, 399) does not justify approving a rate of return appreciably less than would otherwise be compensatory, was made by Circuit Judge Denison, in the opinion of the Special Statutory Court on the recent further hearing in the *Monroe Gas Light Company* case (11 Fed. [2nd], 319).

The *rate of return* required for adequacy is not reflected or limited by the *dividend rate* which the net operating revenue produced thereby might yield upon the outstanding common stock of the enterprise. Rates may not be made to yield less than a reasonable return *upon the property*, and a reasonable return upon the *property* is not affected by any incident of the company's financial structure or any *under*-capitalization or *over*-capitalization.

See, the discussion of this phase of the subject by the Special Master (R. 138-39) and by the District Court (R. 320).

(C) Eight per cent. is fully required by the uncontradicted testimony in this case.

The defendants called no witnesses to contradict the qualified witnesses of practical experience who testified in behalf of the appellee. No opinion was expressed that less than eight per cent. was required.

Uncontradicted testimony on the subject of rate of return was presented by Mr. Allison, consulting engineer and adviser of bankers and investors in utility financing and management (R. 1371-1374, 1389), and by Mr. Hoyt, vice-president in charge of public utility financing of the National City Company, thoroughly familiar with the appellee's financial problems and participant in a very large proportion of all of the public utility financing done in the United States, amounting annually to several hundred millions of dollars (R. 1391-1395). Messrs. Hoyt and Allison have been accepted as experts on this subject, by many Courts and Commissions, as reference to their testimony and to the above cited cases will show.

Mr. Hoyt developed in detail the reasons why a rate of earnings much in excess of eight per cent. upon the present cost to build or buy, is unquestionably required by a public utility in New York City. He said that in order to attract new capital a gas utility such as the appellee would have to *earn* at least nine or ten per cent., and to *distribute* to stockholders at least eight per cent. upon the present reproduction cost of the property (R. 1399-1403).

Both Mr. Hoyt and Mr. Allison referred to the fact that when the appellee needed no more than $30,000,000 of new capital, late in 1923, the money actually cost the company more than ten per cent. (R. 1387, 1395), and that the appellee's common stock has been recently sold on an eight per cent. basis (R. 1388-1390, 1395-1396). Mr. Hoyt added that he doubted if the company could have procured even $30,000,000 of new money on a *ten* per cent. basis, if it had not been known that, owing to the *under*-capitalization of the appellee, the company was earning, from its ownership of electric companies in addition to its own gas business, about 14 per cent. upon its capitalization, figuring all of its

stock at the price being paid per share for the new issue (R. 1396).

The reasons why, as the Courts have found in many of the cases above cited, the rate of return must be calculated upon the present cost of building or buying the utility's present plant and property (including working capital and going value), are that such present cost to replace or buy such a going property represents the *present worth* of what the investors have in the project (R. 1370). They cannot get this sum out and switch it to some other enterprise, so their capital is disadvantaged, held under duress, and subject to prejudice and confiscation, if they are refused the *rate* of return customary in such enterprises or if such return is calculated upon an amount *less* than it would cost *other* investors to build or buy the property necessary to render the same or an equivalent service (R. 1371).

If other investors came into the field *they* would have either to pay the *present* cost of *building* such a property or would have to *buy* the existing property at a figure approximating the present cost to build it. *They* would be allowed to earn a return upon such present cost to build or buy. If the *existing* investors are limited to a return upon any lesser sum, they are prejudiced and disadvantaged, because their money is already in the project (R. 1372).

(D) Appellant's brief shows no reason for disturbing the finding of the District Court.

The appellant's brief (pages 111-114) quotes at length *from the opinions summarizing the evidence* in the first rate suit of the appellee; but carefully refrains from mentioning that this evidence related to the years 1905 and 1906, and that there is no such evidence in the present

record, and no proof that a rate of return which barely escaped condemnation as confiscatory twenty years ago must be deemed adequate and compensatory now.

At page 116, the appellant's brief refers to the uncontradicted testimony that *late in* the year 1923 (one of the test years here litigated), this appellee had to pay more than eight per cent. for $30,000,000 of new capital. If it was necessary to sell on a basis of *paying out* much more than eight per cent., in order to get only $30,000,000 of new capital, then surely it was necessary to *earn* more than eight per cent., in order to avoid injustice to the members of the public whose monies were *already* invested in the appellee's properties, to the extent of many times the 1923 requirements for *new* capital.

Appellant's brief *asserts* (R. 116-117) that the gas business has become highly non-competitive, but it does not cite or quote any testimony to sustain such an assertion, as to post-war conditions. If any such issue had been seriously tendered on the trial, the facts would have been placed in the record that the gas business has become subject to *many competitive hazards,* as well as the regulatory hazards of which Mr. Hoyt testified (R. 1394-1399). Instead of quoting from the proofs in a prior suit as to conditions in 1905 and 1906, counsel for the appellant might more usefully have referred to the strenuous competition to which the gas business is subjected today—from oil-burning devices, "gasifiers," electricity, coal, coke, etc.

Few industrial enterprises of today are subject to as alert and active competition from as many sources. The most vigorous efforts of the gas industry in America have been directed, in recent years, and are being directed to meeting this manifold competition. These facts are as foreign to this record as are the appellant's mis-statements

of the modern situation; we refer to the actualities only because the appellant has gone far outside the record to erect an argument on assumptions which are unsupported by the record and false in fact.

Upon the whole situation, the uncontradicted evidence in this case shows clearly that eight per cent. was and is a moderate figure as to this appellee, and the finding of the District Court was fully warranted.

POINT EIGHT

APPELLANT'S ATTACKS ON THE COURT AND MASTER

At pages 38 and 86 of his brief the appellant's insinuations against virtually everybody become a direct charge of irregularity and neglect against the Court and bias against the Master. The latter is charged with bias and virtual disqualification because he had served in a similar capacity in the *Brooklyn Union* case, in 1921, in which his findings were affirmed by this Court (258 U. S. 604), and because, when several cases were referred to him in the present series of suits, those first tried and decided were the *New York and Queens Gas Company* case and *The Bronx Gas and Electric Company* case, so that he had already passed twice upon the questions of law involved in this case before he took the testimony herein. The Trial Judge is charged by the appellant with misconduct because he approved of the report of a Special Master whom he appointed, and with neglect of judicial duty because he filed an opinion of no more than five pages.

These aspersions have never been made in this case before, and have no place in it now. There is no assignment

of error based on any such claim. The attempt of appellant's counsel, who participated actively and ably in the prior litigation under the eighty-cent rate law (258 U. S. 167), to cast personal aspersions upon the present Master and the District Judge, seems an ungracious repetition of the baseless charge which the appellants in the prior case made that "they were denied fair and impartial trial both by the Master and the Court," and which this Court held was frivolous as to the Trial Court and unfounded as to the Special Master (258 U. S. 175).

The long experience of the Master at the Bar and in the Attorney-General's office, as well as his judicial service as referee and master in many important cases, were, of course, qualifying, rather than disqualifying, attributes for appointment as Special Master in this case. (*Chicago, Mil. & St. P. Railway Co.* v. *Tompkins*, 176 U. S. 167, 180.)

His service in the 1921 case of a Brooklyn company cannot be deemed disqualification or prejudicial, else the members of this Court who joined unanimously in confirming his report (258 U. S. 604) would be condemned by the same rule. That the Special Master had first heard and reported in two other cases of the same series cannot be deemed prejudicial, because they were very vigorously tried by all parties and resulted in reports from which the Attorney-General has prosecuted no appeals (appeal dismissed: 268 U. S. 708). If, as appellant urges, these two prior cases involved the same questions of law and fact as the present case, so that the Master and District Court had already passed on the present questions before testimony began herein, then the Attorney-General should have appealed those decisions. He evidently thought that the rulings of this Special Master and District Court on these questions of law could become final in Queens and The Bronx without having any direct effect on the law in Manhattan!

The appellant's charge of procedural irregularity

On page 38 of his brief, the Attorney-General makes the charge that

> "In this case for the first time the same judge who appointed the Master approved his report, taking jurisdiction over the final hearing over the protest of appellant after the case came up in its due order before another judge."

The Attorney-General ought to know that in both the Eastern and the Southern Districts of New York, the long-established rule and practice has been that the report of a Special Master in equity should come before the judge who appointed the Master. In the gas litigation of the past eight years, involving more than twenty cases, we recall only two instances in which any other course has been followed (down to the recent enactment for final hearing by three judges), and in those two instances only by consent under special circumstances.

As to the present Special Master, his reports in the *New York and Queens Gas Company* case and *The Bronx Gas and Electric Company* case had been heard, in the regular course of reference, by the District Judge who appointed him, without any pretence of protest whatever. In another case decided since the present one, that of the *Brooklyn Union Gas Company* (7 Fed. [2nd], 628), the same Judge who appointed the Special Master sat upon final hearing, without any protest from the Attorney-General.

In the present case, counsel for the defendants sought to vary this long-established practice, in a most absurd way. Appellee's motion to confirm the report was made in the regular way, returnable in the motion part of the

Court. The motion came on before Judge Goddard who, upon his own initiative and without protest, referred it to Judge Winslow, who had appointed the Master and who had heard the previous cases. Counsel for the appellant moved before Judge Mack for a sustaining of his *exceptions to the report*, thus proposing to have one judge pass on the report and another on the defendants' exception, which would hardly be the "due order" (Brief, page 38). Judge Mack said that he would of course follow the usual practice and refer the exceptions to the judge who had appointed the equity Master. There is no record or recollection whatever of any alleged "protest" against such reference or against a final hearing before Judge Winslow.

The charge against the District Court

The further charge is that Judge Winslow was "routine" (page 39), "cursory" (page 38) and "superficial" because his opinion *in this case* was only five pages long. At page 86, appellant's counsel makes the direct and astounding charge that "*the Judge who reviewed this case in the Court below gave it no attention whatever.*"

Judge Winslow, who heard this case, had previously decided the suits of the New York and Queens Gas Company, and The Bronx Gas and Electric Company against the same statute. In the *New York and Queens Gas Company* case, counsel for the respective parties went extensively and exhaustively into virtually the same questions of law and fact which were subsequently litigated in the case of this appellee. Counsel submitted to Judge Winslow voluminous briefs, after the oral argument. He filed an opinion (1 Fed. [2nd], 351, 371 to 377), which discussed the principal questions at some length. Again, in *The Bronx*

Gas and Electric Company case, similar questions were exhaustively briefed, argued, and decided (1 Fed. [2nd], 377).

After the full and complete report by the Master in the present case, Judge Winslow heard argument of counsel on March 28, 1925, and received exhaustive briefs from each of the parties. A month later, he filed an opinion, in which he referred to the consideration which he had given to the same questions of law and fact as to the same statute in his decisions in the two prior gas-rate cases and in *New York Telephone Company* v. *Prendergast* (300 Fed. 822), in which he had also taken part (R. 318; 320-321). The same charge of cursoriness and superficiality was made, in the prior suit against Judge Learned Hand, before whom the argument was conducted on July 9, 1920, and who filed his opinion on August 4, 1920, within less than a month (267 Fed. 231); and the same counsel who helped in the frivolous attack on Judge Learned Hand before this Court for giving scant and unfair consideration to the record in the prior action now extols "the conclusions reached by the fresh mind of Judge Hand after painstaking and diligent study on the same subject-matter" (Appellant's Brief, page 38), but turns his invective against Judge Winslow.

The alleged "bias" of Courts and Masters

For the insinuation (page 39) that the decision against this statute was due only to bias on the part of this particular Master and Court, there is not the slightest foundation. If this Master's "attitude of mind pointed with exactitude to his final determination," that respect for the facts seems to have been shared very generally by the many judicial officers who have considered this rate legislation. *No Court or Master has upheld its provisions as to* ***any company,*** *on either preliminary or final hearing.*

The Special Statutory Court in the Eastern District, composed of Mayer, *C.J.*, and Campbell and Garvin, *D.JJ.*, on July 2, 1923, granted a preliminary injunction to the Brooklyn Union Gas Company and all the other gas companies in that district.

Similar interlocutory action was unanimously granted on July 6, 1923, as to this appellee and all other gas companies in the Southern District of New York, by the Special Statutory Court for that district, composed of Rogers and Hough, *C.JJ.*, and Bondy, *D.J.*

Both of the Special Statutory Courts thus enjoined any enforcement of the $1.00 rate for 650 B.t.u. gas, on condition that the gas companies continue in effect *pendente lite* the rates fixed by the Commission and on the further condition that they continue to furnish gas of the thermal content which the Commission had authorized as the basis for such rates. If the 650 B.t.u. provision had not been everywhere enjoined by the Special Statutory Courts as one of the conditions of the preliminary injunction, higher interlocutory rates would of necessity have been prescribed (see Point Four, *ante*).

In the *Kings County Lighting Company* case, the Special Master was Almeth W. Hoff, Esq., appointed by Judge Campbell, and his report was heard and confirmed by Manton, *C.J.*, and Campbell and Inch, *D.JJ.* (7 Fed. [2nd], 192).

In the *New York and Richmond Gas Company* case, the Special Master was Appleton L. Clark, Esq., appointed by Judge Campbell, and his report was heard and confirmed by Manton, *C.J.*, and Campbell and Inch, *D. JJ.* (10 Fed. [2nd], 167). The Attorney-General has taken no appeal.

In the *Brooklyn Union Gas Company* case, the Special

Master was Almet R. Latson, Esq., appointed by Judge Campbell, who heard and confirmed his report (7 Fed. [2nd], 628).

In the *New York and Queens* and *The Bronx Gas and Electric Company* cases, the Special Master was Mr. Graham, appointed by Judge Winslow, who heard and confirmed his reports (1 Fed. [2nd], 351; 268 U. S. 708; 1 Fed. [2nd], 377). The Attorney-General has prosecuted no appeal.

In the *Brooklyn Borough Gas Company* case, decided on October 2, 1926, the Special Master was Alvah W. Burlingame, Esq., appointed by Judge Campbell. This report has not yet come on for hearing.

Five different Masters and nine different Circuit and District Judges have ruled against this $1.00 rate and 650 B.t.u. standard.

Previous litigation involving the statutory rate of $1.00

The adequacy and validity of a statutory rate of $1.00 per thousand cubic feet of gas as to gas companies operating in the City of New York, had also been the subject of recent litigation *before* the passage of the Act of 1923, and that rate had been uniformly held by the Federal Courts and the State Courts to have been inadequate, confiscatory and unconstitutional, even for gas of the quality then being supplied.

On March 6, 1922, this Court unanimously affirmed the findings of the District Court for the Southern District of New York that the statutory rate of $1.00 for gas furnished by the New York and Queens Gas Company yielded less than bare operating costs (*New York and Queens Gas Com-*

pany v. *Newton,* 269 Fed. 277; affd. 258 U. S. 178). The Special Master who reported in that case was Abraham S. Gilbert, Esq., and his report was confirmed, on final hearing, by Judge Mayer.

On February 3, 1923, the New York Court of Appeals, by denying leave for an appeal to it by the City of New York from an order of dismissal made by the Appellate Division for the Second Department, declined to disturb the judgment rendered on January 10, 1921, by the Honorable Albert H. Sewell, Ex-Justice of the Appellate Division, as Official Referee, that both the $1.00 rate for gas and the 22-candle power standard were unconstitutional in the Borough of Richmond (*New York and Richmond Gas Company* v. *Nixon, as Public Service Commissioner, et al.;* decision and judgment filed in New York and Richmond County Clerk's office January 10, 1921; appeals of defendants Nixon, Newton and Maloy dismissed, 203 App. Div. 861; appeal of City of New York dismissed, 204 App. Div. 838; motion for reargument denied, 204 App. Div. 894; motion for leave to appeal to Court of Appeals denied by Court of Appeals, *N. Y. Law Journal,* February 3, 1923; not officially reported).

On October 25, 1922, the Honorable George V. S. Williams, formerly a member of the Public Service Commission, appointed by the New York State Supreme Court as Referee to hear and determine, rendered a decision and judgment that the $1.00 rate was "confiscatory by so wide a margin" as to The Bronx Gas and Electric Company as to render a detailed review of the evidence almost superfluous (*Bronx Gas and Electric Co.* v. *Public Service Commission,* 28 N. Y. State Dept. Rep. 329; P. U. R. 1923A, 255). On February 21, 1924, that decision was unanimously affirmed by the Appellate Division for the First Department (208

App. Div. 780). Leave to appeal to the Court of Appeals was denied (208 App. Div. 806).

Litigation instituted in 1918 and 1919, by other companies for which an eighty-cent rate had been prescribed by Chapter 125 of the Laws of 1906, and amendments thereof, resulted in decisions establishing the confiscatory character of such litigation:

Kings County Lighting Co. v. *Nixon,* 268 Fed. 143; 258 U. S. 180; in which Gordon Auchincloss, Esq., was Special Master and Judge Hough confirmed his report on final hearing;

Consolidated Gas Co. v. *Newton,* 267 Fed. 231; 274 Fed. 986; 258 U. S. 165; in which case Mr. Gilbert was Special Master and Judge Learned Hand sat on final hearing;

Newton v. *Central Union Gas Co.,* 259 U. S. 101; involving also the cases of four other companies, in all of which Mr. Gilbert was Special Master and Judge Mayer confirmed his reports on final hearing;

Brooklyn Borough Gas Co. v. *Pub. Serv. Comn.,* 17 N. Y. State Dept. Repts 81; P. U. R. 1918 F, 335; before ex-Justice Charles E. Hughes as Referee in the State Supreme Court;

Kings County Lighting Co. v. *Lewis,* 202 App. Div. 473; 235 N. Y. 599; which was tried before Mr. Justice Greenbaum;

Brooklyn Union Gas Company v. *Newton,* 2 Fed. [2nd], 118; 258 U. S. 604; in which Mr. Graham was the Special Master and Judge Mayer confirmed his report on final hearing.

POINT NINE

RATES CHARGED BY APPELLEE SINCE 1920

A large part of the appellant's brief is built on a reiterated assertion (which would be of doubtful materiality if true) that from and after March 1, 1921, appellee was "free from all regulation" (page 7), for a period which the appellant charaterizes as "*eighteen* months of lack of regulation" (page 7), and that consequently the appellee's real idea as to what its "rate base" ought to be may best be inferred from the amount of property on which it earned a return, during the period when it fixed and changed its own rates at will, freed from any manner of public control (Brief, pages 7-10). This assertion and assumption occurs and recurs throughout the appellant's brief (pages 7-10, 32, 45, 51, and 116), as the major strain of the effort to excite prejudice against the Master and District Court as well as against the appellee. The appellant's principal attack on the "rate base" fixed by the Court is that the appellee did not earn a return upon such a sum, when it could and did fix whatever rate it pleased (Brief, pages 9-10).

The first difficulty with this basic argument is that its fundamental assumption is utterly untrue! The fact unquestionably is that at no time during the period specified by the appellant have the rates of the appellee been free from regulatory control by the defendant Commission!

When Judge Hand entered his final decree of August 6, 1920, he inserted in it a condition limiting the appellee's rates to $1.20, until March 1, 1921. This limitation was said by this Court to be "*a limitation in favor of the consumers*" (258 U. S. 165, 178); in fact, it was entirely unnecessary. As was said in the brief of this appellee before

this Court in 1921 (Case No. 257; October Term, 1921; *Newton* v. *Consolidated Gas Co.;* Appellee's Brief on the Facts, pages 19-20):

> "*Upon* the entry of the decree suspending the 80-cent limitation, the appellee became instantly subject to the revisory action of the State Commission, if the new rate promulgated was deemed unreasonable by that body or was complained of as excessive by interested consumers. * * *
>
> "Upon the entry of an injunctive decree restraining the 80-cent statute, the State Commission became immediately vested with power to regulate and revise any rate promulgated by the company."
>
> *Morrell* v. *Brooklyn Borough Gas Company,* 231 N. Y. 398;
> *Bronx Gas and Electric Company* v. *Public Service Commission,* 190 App. Div. 13.

Immediately upon the filing of the final decree of August 5, 1920, the appellee filed with the Commission a rate schedule showing the new rate permitted by the Court. At all times since that date, the appellee's rate schedules have been on file with the Commission, and have been subject to investigation, regulation and reduction, upon complaint of consumers or the initiative of the Commission.

When Judge Hand removed his limitation, as of March 1, 1921, because of the increase in the price of gas-oil, the appellee, for the same reason, went to the Commission for a new rate which would reflect the increased cost due to the increased price of oil.

The appellee could not have filed and put in force any rate it pleased, as appellant asserts. In addition to its power to investigate and reduce the rate of any company which had obtained a final decree, the Commission also

exercised the power to reject and refuse to file a gas-rate schedule which proposed a rate which the Commission thought was too high. The Commission did this in 1920, in the case of the *Bronx Gas and Electric Company* (113 Misc. 166), which tried to file and put in effect a rate higher than $1.50, after it had obtained a final decree in the State Court. The appellee could not have filed a rate higher than $1.50, and it kept its public promise that as soon as the price of gas oil went back to its more normal level, it would reduce the $1.50 price accordingly.

Nor was the power to investigate and reduce any rate, and the power to reject a schedule offered for filing, all the regulation to which the companies were subject. Effective April 23, 1921 (only 54 days after March 1, 1921, when appellant says the appellee became "free from all regulation"), the Commission had the further power to *suspend* any tariff schedule which was filed with it by a gas company (R. 34), and no *increase* in gas rates could be made effective until the consent and approval of the Commission was *first* obtained (L. 1921; Ch. 134; Sec. 72). This record shows that during April and the next few months of 1921, *the Commission suspended every increased gas rate filed for New York City* (R. 34), by companies which had just obtained decrees against the eighty-cent law; and that, on June 7, 1921, the Commission instituted hearings as to the rates of the appellee and every other gas company in New York City (R. 35), with the result that practically every rate was reduced by order in 1922 (R. 44). All of these things took place *early* in the period, dating from March 1, 1921, which the appellant calls "*eighteen months of lack of regulation*"!

The foregoing facts from this record will reveal the truth or falsity of the appellant's reiterated assertion

that the appellee was "free from all regulation" after March 1, 1921, up to October 1, 1922.

The appellant's assertions as to the appellee and its rates and earnings are as unreliable as his assertions about the statute and the decisions:

1. He says (Brief, page 6):

> "The 80-cent rate had proved profitable to the appellee, at least up to 1917. It had shown good earnings," etc.

This is both untrue and immaterial (*New Jersey Telephone Company* case; *Newton* v. *Con. Gas Co.*) This all was litigated in the *former* action (but not in this one), and the facts were shown in detail in Exhibit No. 498 and on pages 269-271 of the Appellee's Brief on the Facts, in Case No. 257 of the 1921 Term. The deficiency in earnings below a *six* per cent. return on *investment only*, from 1907 to 1917, and *eight* per cent. on investment down to August 31, 1919, was $13,907,878.35. This the appellant calls *"good earnings"!*

Appellant says (page 6) that the $1.20 rate fixed by Judge Hand's decree of August 5, 1920, was a liberal rate and "took all doubts in favor of the plaintiff's claim." But *this Court* found that the restriction to $1.20 was "a limitation in favor of the consumers" (258 U. S. 165).

Discussing what it calls "the challenge contained in the rulings of the Court below," the appellant asserts (Brief, pages 8 and 9) that "the company itself certainly considered more than compensatory" its earnings during 1921 and 1922, and reiterates the company's alleged satisfaction with their adequacy, and then proceeds to draw various inferences from the net earnings which he says the appellee

considered "amply compensatory." In the *first* place, as we have just shown, the appellee was not free from regulatory control, at any time during 1921 or since. In the *second* place, the appellant's statements as to the amounts available for return for each of the years 1921 to 1925, both inclusive, and the unit net income, are mathematically incorrect and misleading, with one exception, as the books of account and exhibits in evidence show. For example, as to the return for the year 1921, which the appellant alleges to have been "more than compensatory" and which he incorrectly computed at $4,404,000.00 (the correct figures being substantially less than that amount), the appellee claimed and tried to prove that it was entitled to earn, in that year, $10,790,502.71, as shown by its Exhibit No. 879 (for *Id.*).

As discussed in detail under Point Fourteen, hereinafter, Exhibits Nos. 879 and 882 (for *Id.*), show that the rates actually charged by the appellee during 1917 to 1921, both inclusive, resulted in a total deficiency of more than $24,000,000 in the earnings below an eight per cent. return on the appellee's *investment*. Although the Special Master excluded this offer of proof (R. 140), the facts do not constitute any admission of great "satisfaction" (Brief, page 12) with the rates or the results.

Appellant builds a large part of his brief on an assertion that the $1.15 rate of August 30, 1922, was "acquiesced in by appellee" (page 1) and was deemed adequate and "certainly more than compensatory" (page 9). *Both* the Commission in fixing the $1.15 rate, and the appellee in accepting it, stated frankly their realization that it was not adequate and would not yield even a proper return on the investment (R. 44, 10-11). The appellee definitely reserved its rights, asserting that the rates fixed by the Com-

mission were "*substantially less than adequate* under present conditions" (R. 11).

Appellant paints a dire picture (brief, page 10) as to what would happen if the appellee should charge rates yielding an eight per cent. return upon the reproduction value which it proved or even upon the much lower present value found by the Master. Appellant fails to distinguish between the *prerogatives* of the owners and managers of private property and the *limitations* on the public regulation of it.

See cases cited on pages 80 to 83, *ante*.

Management may fix and collect such rates as seem advantageous, reasonable, and suitable to the conditions, subject to *regulation* as to reasonableness, equality of treatment of consumers, adequacy of service, and the like. But *regulation* cannot *force* the earnings of private property below constitutional limits, and question arises whether a *limitation* which regulation tries to place on the rate-making power of management is too low, the value of the property devoted to the public service must be determined according to sound economic principles.

Regulation cannot *limit or reduce* rates so as to deny a fair return upon the *present value* of the property. Such rates are the constitutional *right* of the utility, as against limiting legislation or regulation. As long as a utility's rates do not *exceed* a return upon present value, their form and amount are a function of *management*, subject to reasonable regulation in the respects indicated, according to sound business judgment. Wise management does not adopt legal *maxima* as its rule of rate-making, except when regulation tries to force that barrier down to the extreme limit of non-confiscation.

POINT TEN

APPELLANT'S CLAIMS AS TO RATES CHARGED FOR GAS IN OTHER CITIES

Compelled to base his arguments largely upon assertions concerning matters outside this record, the appellant's brief (pages 7-8) endeavors to create prejudice by comparing the New York City rate of $1.15, as fixed by the defendant Public Service Commission after full investigation (R. 30-44; Ex. No. 209), with the rates fixed by other Commissions for several cities carefully selected by the appellant to support his argument.

This record does not show the rates charged in these other cities, or the conditions which have determined what those rates should be. At least presumptively, the rates fixed by public authority for those cities are reasonable under the light of the conditions controlling their costs, just as are the rates in New York City.

> *Banton* v. *Belt Line R. R. Co.*, 268 U. S. 413;
> *Darnell* v. *Edwards*, 244 U. S. 564;
> *Municipal Gas Company* v. *Public Service Commission*, 225 N. Y. 89, 99.

Unable to get any witness to offer opinion or proof that the appellee's rates are greater than New York City conditions and costs require, appellant selects a list of a few cities, obtains incomplete or inaccurate information as to the rates charged in them, and then asks this Court to *assume*, without proof, that operating conditions and costs are similar in these other cities, so that the New York City rate need not exceed them. By the same method, might the appellee prove that its existing rates are confiscatory, by

showing that they are lower than the rates generally charged for manufactured gas?

This case does not concern the reasonableness of the $1.15 rate fixed and continued by the defendant Commission for this appellee, nor does this record enable this Court to weigh the facts as to comparative costs and conditions in different cities. It is difficult enough to try, brief and argue the case of one company, without undertaking a similar task as to companies in a dozen other cities.

The futility of drawing such a comparison as the appellant relies upon, without having full knowledge as to the details of the rate structures or the differences in operating conditions, may be illustrated by the facts as to Chicago, the city principally discussed by the appellant (Brief, p. 7). His brief asserts that in 1914 the Chicago company was charging 80 cents per thousand cubic feet (which is true) and that today it is charging a rate of 95 cents (which is not at all true). The appellant overlooked the fact that the Chicago company also collects from its general consumers (1) a *minimum bill* of 60 cents per month, for the first 400 cubic feet of gas *or less*, and (2) a penalty of 10 cents per thousand cubic feet of gas, if the bill is not paid within ten days (*American Gas Association Rate List;* January 1, 1924). As a result, the Chicago rate for the first thousand cubic feet of gas used by a consumer is $1.27 (or $1.17 if paid within the discount period). If the Chicago rate had been applied to what the Attorney-General calls the large New York consumption, the average consumers would have paid substantially more than $1.00, as they actually do in Chicago.

The appellant's theory seems to be that the larger a city is, the lower should be the gas rate. Population or its density do not determine the cost of gas; there are many

more potent factors as to gas, even as to other services and commodities. Big-city conditions commonly introduce factors which increase costs and prices, instead of lowering them; and this is true, as everyone knows, despite density of population and increased "business per mile."

Since the Attorney-General has relied upon these comparisons which he has made without dependable information, as to matters wholly outside this record, we may refer to a few of the comparative conditions of common knowledge, but the exact effect of which on rates cannot be conjectured or determined without a careful investigation.

In the Chicago district, there are a number of steel plants equipped with coke-ovens manufacturing metallurgical coke and disposing of the resulting gas as a by-product. All of the excess gas produced by these steel plants must either be blown off into the air or sold for such prices as can be obtained. The consumers of the Chicago company benefit by this situation. No such condition obtains in New York City. Other cities listed are located in natural gas territory and are supplied with a mixture of natural gas and manufactured gas. Many cities receive coal much more cheaply than New York. All coal received in New York must be re-handled in the harbor under precarious conditions which make necessary a large tonnage being carried in reserve. Coal is received in Chicago directly by rail from mines not very far away. Manhattan Island is the most congested spot of equal area in the world. Living costs make wages higher; sub-surface conditions make the distribution of gas expensive.

One of the most decisive factors of all is the "load factor" in the demand for gas, which determines the amount of capital investment in plant and property, per thousand cubic feet of annual sales. The "load factor" for Chicago

is 71; for Boston, 78; for Philadelphia, 68; for Milwaukee, 82; for Detroit, 78; for the appellee's system in New York City, only 58.

No gas company can control the *maximum* demand of its consumers for gas, in relation to the *average* demand. It must supply and maintain capacity for the *maximum*, even though the *year's* total requirements are only 211 times that maximum, as they are in New York, or 259 times, as they are in Chicago, or 247 times, as they are in Philadelphia, the third city on the appellant's list. In most of the cities above mentioned, the *maximum* day is about twice the *minimum;* in New York, it is 3.8 times. This is largely due to New York City's habit of vacations and suburban residence during the summer months. Gas companies cannot control the habits of their patrons. Facilities must be provided for the maximum day even if it should be but one day. The appellee with a load factor of 58 per cent., must have a much larger investment per thousand cubic feet of annual sales than other companies with a load factor largely in excess of this figure.

We have already shown the unreliability of the appellant's comparisons as to the 1914 and 1923 rates. Many cities have increased their gas rates in a much higher ratio since 1914 than the appellee, although the appellee was then struggling under an 80-cent rate since adjudged confiscatory. Different conditions develop from time to time in different cities and make unreliable any superficial comparisons of the rate increases in those cities from 1914 to 1924:

> (1) Between those years, some companies have begun the purchase of by-product gas or have changed the ratios of such purchase; and the cost of by-product gas has not been controlled by all of the same factors as gas made by a utility.

(2) Some companies have begun the purchase and mixing-in of natural gas, or have changed the ratios of their mixture; and the cost of natural gas has not been affected by the same factors as manufactured gas.

(3) Changes in the required calorific standards have been numerous, since 1914, and they differently affect production and distribution costs.

(4) Relative proximity to the sources of raw materials affects different utilities differently, in a period of changing price levels and purchasing power of the dollar.

If this whole issue of comparative rates were pertinent and had been tendered on the trial, we would gladly have demonstrated that the appellee's rates, as fixed by the defendant Commission, are comparatively as well as actually most reasonable. In the foregoing comments, we have tried only to demonstrate briefly the utter unreliability of the appellant's attempt to create a comparison "out of the air."

POINT ELEVEN

APPELLEE'S "RATE BASE" AS COMPARED WITH PRICE PAID BY APPELLEE FOR NEW YORK MUTUAL PROPERTY WITH COMMISSION APPROVAL IN 1922

On page 14, *et seq.* of his brief, counsel for the appellant places great emphasis upon an assertion that the appellee's "rate base," as found by the Special Master and District Court, is

> "enormously high, compared with less favorably situated gas companies in New York City."

This charge is either true or false. The principal instance relied on to prove it is the price paid by the appellee in 1922, for the operating properties of the New York Mutual Gas Light Company. Incidental reference is made to the Brooklyn Union Gas Company.

There was a large minority interest (45 per cent.) in the stock ownership of the Mutual Company, who were not anxious to continue in the gas business (Ex. No. 199; R. 2169-2173). They were willing to sell, and to let the majority owner have the property (R. 2170). The appellee could afford to pay for the property only the amount on which the Commission would allow any owner of it to earn a return. The minority could well afford to sell at that price; they could not expect to be paid more for their desired liberation. So both sides naturally asked the Commission to fix a price which would represent the sum on which the property would be allowed to earn a return (R. 2170-2171). The Commission did so (R. 2174). The Commission at that time was fixing rates for gas companies only on the basis of original investment (R. 42). It fixed the rates for all New York City gas companies on that basis, over their protest (R. 10-11; 2300-2301), on August 30, 1922 (R. 2188; Ex. No. 209), the day before the closing of the Mutual transaction (R. 2175).

Many of the appellant's assertions (pages 14-15) as to factors affecting the Mutual plant and operations are untrue, as this record shows, but we shall here deal only with the appellant's basic assertion.

Appellant states (page 14), in substance, that the present value of the property of the appellee devoted to the service of its consumers June 1, 1923, as found by the Master (Finding No. 102; R. 202) amounted to $134,101,-

738.77, which sum, divided by 24,057,694,000 cubic feet of sales during 1923, amounted to $5.57 per thousand cubic feet of gas sold to consumers. This is true.

Appellant then charges (brief, page 16) that the appellee acquired the property of The Mutual Company for the sum of $10,010,630, "which amounts to only $3.33 per thousand cubic feet of gas made and $3.65 per thousand cubic feet sold to consumers." On this assertion, he bases a seathing arraignment of the appellee and its "rate base" of $5.57 per thousand cubic feet of gas sold to its consumers. *But the appellant's figures and his computations are wrong; when they are corrected, his argument falls "like a house of cards"!*

The price paid by the appellee for the gas properties of The Mutual Company, which it acquired September 1, 1922 (exclusive of working capital), amounted (R. 2182-2183) to $10,010,630. This amount, divided by the 1,992,-846,800 cubic feet of gas sold by The Mutual Company during 1921, the last calendar year of operation of that company (Ex. No. 765; R. 1112, folio 1649), amounted to more than $5.02 per thousand cubic feet of gas sold to consumers or $1.37 more than the price per thousand cubic feet stated in the appellant's brief.

In still another respect, aside from the appellant's errors in mathematics, the unit figure of $5.57 for the appellee is not comparable with any unit derived from the $10,-010,630 paid for the Mutual properties. The $5.57 for the appellee was computed from a total valuation which included $5,900,000 for working capital, $9,000,000 for going value, and $7,781,000 for franchises and rights; the purchase price of the Mutual properties did not include *any* of these elements. If only working capital were added to the $10,010,630 on the same basis as it is in the unit of $5.57

for the appellee (viz., at an amount equivalent to 25 cents per thousand cubic feet of annual sales), the price paid by the appellee for the Mutual property would amount to $5.27 per thousand cubic feet of gas sold, or approximately the same unit price as that found by the Master to be the value of all the property used in the service of appellee's consumers on December 31, 1923. If the other elements were included, to put the unit figures on as nearly a comparable basis as possible, the $5.57 would be exceeded.

The Commission's findings also disprove the appellant's computations

The findings of the defendant Commission destroy the appellant's figures and argument altogether, because they leave no variance. The investment of The Mutual Company in all the gas property (including working capital), owned by it and employed in the gas business on June 30, 1922, as found by the Public Service Commission and set forth in its Opinion and Order dated August 30, 1922, in Cases No. 79 and 108 (R. 30-54), and upon which the appellee's application for permission to acquire the property of The Mutual Company was based and was granted by the Commission, amounted to $11,057,916.07 (R. 42), or $5.55 per thousand cubic feet of gas sold by The Mutual Company during 1921, as compared with the present value found for the property employed by the appellee in its gas business on June 1, 1923, of $5.57 per thousand cubic feet of annual sales.

Furthermore, the manufacturing plant of The Mutual Company was only water gas, whereas the property used by the appellee and valued by the Special Master included large units of coal-gas manufacturing plant at an acknowl-

edged cost per unit of capacity at least double that of water-gas. Moreover, the territory of The Mutual Company was compact, in one part of Manhattan, and it did not have to use under-river tunnels or long transmission mains.

If the appellant should now suggest that the Mutual unit figure to be compared with the appellee's unit per thousand cubic feet of gas sold should be obtained by dividing the sale price by the total 2,518,887,000 cubic feet of gas *made* by The Mutual Company during 1921 (which included 367,610,500 cubic feet made for other companies), the price paid by the appellee (which was exclusive of working capital) would still amount to more than $3.97 per thousand cubic feet *made,* or 64 cents more than the price per thousand made, as represented by the appellant (page 16). It should be mentioned, of course, that the unit property per thousand cubic feet of gas *made* (part of which gas is delivered directly into the mains of other companies and so does not necessitate the usual distribution properties) is not comparable with a unit figure per thousand cubic feet of gas *sold to consumers,* by a company (such as the appellee) which distributes to its own consumers all of the gas which it makes, and much more.

In passing, we refer to the insinuation (Appellant's Brief, page 17) that the $515,000.00 credited to surplus by the appellee represented a "handsome profit" on the securities of The Mutual Company. This sum was the difference between the sums paid by the appellee for The Mutual Company's stock, acquired largely during 1899, and the amount realized upon dissolution of The Mutual Company 23 years later, following the sale of its properties. For its investment in these securities, held for 23 years (in many of which no dividends were received thereon), the appellee

realized a profit of $27.30 per share, which amounted to nine per cent. on the price paid by the appellee for the stock. Nine per cent. profit on a 23-year investment is what the appellant calls "a handsome *profit* to stockholders" (Brief, page 17).

The unit valuation of the Brooklyn properties

The appellant's statement (page 16) that the valuation found in the *Brooklyn Union Gas Company* case amounted to $3.60, on annual sales, as compared with $5.57 for the appellee, is correct. The appellant omits to state the *reasons* for this variance, which are before the Court in these two records. The Brooklyn Union Company is able to have all (not merely a part) of its plants in its distribution districts, and so does not have any expensive investment in tunnels.

Land values are much lower in Brooklyn than in Manhattan, and the Brooklyn Union Company rents a good deal of the property it uses. The Brooklyn streets are generally wider, have less congestion of sub-surface structures, and contain much less rock, all of which reduce the cost of distribution properties. The Brooklyn Union Company has no rented appliances on the district, as has the appellee; this reduces the Brooklyn unit cost of property, but, as shown on page 96, *ante*, decreases also its miscellaneous operating revenues which are credited against the cost of gas. The Brooklyn Company has no coal-gas capacity in its manufacturing plant; coal-gas apparatus was stated by the appellant's expert to cost twice as much as water-gas, for which the lower production costs have to compensate (R. 1890).

Of the difference between the $5.57 and the $3.60, the

tunnels account for 20 cents and the appliances for about 25 cents. The *Brooklyn Union* figure excludes the amount found by the Master in that case for going value, equivalent to 40 cents, and contains no allowance for franchises and rights (212 U. S. 19), amounting to 32 cents. The inclusion of these four items, wholly absent from the Brooklyn figure, would bring it to $4.77, as compared with the $5.57, and the remaining 80 cents is more than accounted for by the differences due to the other conditions above mentioned.

Appellant carefully refrains from mentioning the fact that the unit present value of the property of the other company before this Court is $5.93, as compared with the appellee's $5.57, although the Kings County Lighting Company is also located in Brooklyn. But it is situated in a territory in part sparsely settled, and its unit cost of mains is 57 cents higher than the appellee's and of services is 54 cents higher than the appellee's. This is partially offset by the other favorable conditions which have been above enumerated as obtaining in Brooklyn as compared with Manhattan.

The net conclusion must be that superficial comparisons between unit valuations, even when free of such glaring mathematical errors as have entered into the appellant's computations, are wholly misleading, unless all the relative conditions are weighed and taken into account.

POINT TWELVE

MANHATTAN PLANT-SITES NOT "TOO EXPENSIVE"

Appellant's brief (pages 17-22), under the heading of "expensive real estate in Manhattan," attacks as "more or less antiquated" the appellee's present gas plants in Manhattan, and argues that these plants serve no useful purpose but are continued only for "the real purpose" of occupying the land until the appellee sees fit to sell their sites as "profitable land speculations" (Brief, page 22). These improvident plant-sites and the values fixed for them by the Master are specified by the appellant as follows:

42nd Street plant.....	$2,135,000
14th Street plant.....	1,547,055
21st Street plant.....	2,166,000
11th Street plant.....	1,466,875
99th Street plant.....	724,000
	$8,038,930

In the first place, it should be noted that the above-stated values of land occupied by Manhattan plants are as of June 1, 1923 (R. 185). As of December 31, 1923, and subsequent dates, the 14th and 42nd Street plant sites had disappeared from this list, because the appellee had sold them, leaving only $4,356,000 (R. 96), representing land at the 21st Street, 11th Street, and 99th Street stations of the appellee.

In the second place, not nearly all of this $4,356,000 of Manhattan land was or is occupied and used by manufacturing plants. Appellant magnanimously concedes (page 17) that the appellee "must have some real estate in Manhattan for its offices, repair shops, holders, etc." This seems

reasonable, because the appellee's consumers are all in Manhattan. Yet his tabulation overlooks the fact that all of the land in Blocks 951 and 952 at the 21st Street Station and practically all of the land in Block 953 (R. 380) is devoted to the purposes for which he states that the appellee must have land on Manhattan Island. This is also true of a portion of Block 987 (R. 380). Likewise at the 11th Street Station a substantial part of the land (practically one-half) is employed for the purposes for which he admits the Company must have land on Manhattan Island (R. 370-371). Taking from the Court's findings for the land at the three stations (R. 185), about one-third of the 11th Street land (or about $500,000.00), and the valuation of Blocks 951, 952 and 953 (or about $987,000.00), there results at least $1,487,000.00 worth of land which the appellant admits the company must retain, and would have to retain if it had no plants in Manhattan, viz., for holders, governor houses, repair shops, etc. Therefore, at December 31, 1923, and subsequent dates, the appellee has had approximately $3,000,000 worth of land occupied by its Manhattan manufacturing plants, which had and have a capacity of at least 67,500,000 cubic feet of gas a day (R. 155).

Appellant endeavors (page 18) to suggest an unfavorable comparison between the Manhattan plants and Astoria, as to the "expensiveness" of the land occupied by them. If the $3,000,000.00 of present value of the land on which the 99th, 21st, and 11th Street plants are situated be divided by the manufacturing capacity of the apparatus located on such land, there results a figure of $44.50 worth of land as required for each one thousand cubic feet of manufacturing capacity in Manhattan. The Court valued the Astoria land at $4,350,000.00, which, divided by the 86,000,000 cubic feet manufacturing capacity of that plant,

gives a unit figure of $50.50 worth of land per 1,000 cubic feet of manufacturing capacity at Astoria.

Appellant's stipulations and the admissions of his witnesses

Appellant's brief attacks these three Manhattan plants as "antiquated" and denies that these plants and plant sites are useful in the appellee's gas business. In making this contention now appellant forgets:

(1) That he *stipulated* that *all* of the buildings, apparatus, equipment, etc., comprising these three plants were used and useful in the appellee's gas business on June 1, 1923 (R. 2441). Can he contest the usefulness of the *land* and stipulate the usefulness of the buildings and machinery on the land?

(2) That the appellant Attorney-General's own expert (Mr. Little) testified (R. 1877) that "these Manhattan plants are reasonably efficient, well-designed and excellently maintained." He further testified "I would call all three of these Manhattan plants very compact, particularly so as to the 21st Street plant" (R. 1877), and further that "the land is reasonably used" (R. 1877), and he stated repeatedly (R. 1877) that these plants were in an excellent state of upkeep and repair. Referring to the 11th Street, 21st Street and 99th Street plants, he testified (R. 1880) that "I would not advise their abandonment and withdrawal from use by the Company now. It could not be done. I would not advise it if it could be done. I would not advise it at any time in the next five or ten years." He repeated this statement further down on the same page. Mr. Little's testimony as to the need for continuing the Manhattan plants is quoted on pages 82 to 86, *ante*, followed by the proofs that the gas made in these plants costs the appellee less than the gas brought from Astoria.

(3) The same questions as to these three plants were raised and argued in the District Court and before this Court in the prior suit, and this Court affirmed findings which rejected the contention that these three plants should be abandoned.

(4) The same questions were raised before the Commission, in 1922, and it included all of the Manhattan plants as used and useful (R. 42).

If, as the appellant has stipulated, all of the structures and equipment comprising these three plants are used and useful in the appellee's gas business, then the same thing must be true of the land on which they stand. In the face of such a stipulation by himself, and such testimony by his sole engineering witness, and the patent facts as to the compact character of these plants and the low cost of their land *per unit of capacity,* how can the appellant justify his present contentions?

On pages 19 and 20, appellant's brief seeks to create "atmosphere" by quoting, from Judge Hough's opinion in 1906 (157 Fed. 849,857), that jurist's comments on the question whether "land leased, vacant and unimproved" should be included in the "rate base." In that early stage of rate litigation, the appellee proved all of the land it owned, and the Court properly held that only the land used and useful at the time of the inquiry should be included. In subsequent litigation, the appellee has claimed and proved only the land so used and useful, so this ancient quotation gives no color of support to the appellant's present claim.

On page 20, appellant quotes Judge Hough's comment, in 1906, that the company then had $11,000,000 worth of Manhattan land; that the maximum production of its Man-

hattan plants could be sold for only $10,500,000; and that the maximum yearly production of these plants was therefore less than its value. Of course, Judge Hough in 1906 overlooked a fact which the Attorney-General now concedes, viz., that part of this land was necessary because used for branch and general offices, storage holders, repair shops, etc.; but it is not a fact, nor was it then, that the greatest production of which the company's Manhattan plants were mechanically capable was 10,500,000,000 cubic feet of gas, and according to the testimony in that case the maximum manufacturing capacity of the plants was 51,000,000 cubic feet a day or more than 18,000,000,000 feet a year.

Furthermore, notwithstanding Judge Hough's 1906 reference to the folly and improbability of the purchase of any more Manhattan real estate for the gas business of the present appellee, the needs of that business have compelled its competent executives to purchase and put to use since 1906, the following land on Manhattan Island (*exclusive* of the purchase of the Mutual property), with the following values as found by Judge Winslow:

Block	*Lot*	*Location*	*Market Value*	
239	5	Hester and Elizabeth Sts..	$ 25,000.00	(apportioned)
870	47 and 60	General Office Property..	350,000.00	(apportioned)
1028	38	57th Street Office	660,000.00	
1457	6	63rd Street Holder Station	179,000.00	
1998	50, etc.	132nd Street Holder Station	80,000.00	
2108	23	159th Street Shop	21,000.00	
			$1,315,000.00	

The above parcels do not include the purchase, during the current year, of additional land on Manhattan Island, in the amount of $1,300,000.00. The fallacy of the earlier assumption is shown by the fact that since 1906 the appellee has in fact bought over $2,500,000.00 worth of property on Manhattan Island, and each of the above parcels are admittedly needed and useful in the gas business today!

The assumption that the present appellee would not increase the manufacturing capacity of its Manhattan plants has likewise proved unfounded. In 1906, the company's Manhattan plants, including 14th and 42nd Streets, had a daily capacity of 51,000,000 cubic feet (instead of about 10,500,000 cubic feet, as assumed by Judge Hough). On June 1, 1923, the capacity of the Manhattan plants was 67,500,000 cubic feet of gas a day, and the new capacity added at the 21st Street plant in 1923 has maintained that figure, despite the retirement of the 14th and 42nd Street plants. The appellee has thus increased its plant capacity in Manhattan no less than 14,500,000 cubic feet of gas per day, over 1906.

While coal-gas production cannot longer be carried on in Manhattan and there are some economies and advantages in gas production at an outlying location such as Astoria, there also are disadvantages, such as the carrying charges on investment in the tunnels required to bring the gas to Manhattan. The detailed computation of Mr. Woods, Chief Engineer of the appellee, shows a slightly less cost of gas from the Manhattan plants, with all factors considered (Ex. No. 1035; R. 2845-49). Of course, it would not be practicable to manufacture in Manhattan all of the gas sold by the appellee; on the other hand, aside from the slight difference in cost, there are advantages and assurances of continuity of service, in making in Manhattan *some* of the volume of gas sold by the appellee. Tunnels present some hazards and uncertainties (R. 1882). The detailed evidence on these matters is reviewed under Point Three, *ante*.

Comparisons with Brooklyn

Appellant draws a comparison (Brief, page 21) between the appellee and the Brooklyn Union Gas Company, which serves "the most populous parts of the most populous Borough," and its land is "valuable land in that Bor-

ough" (Brief, page 22). Appellant says the land of the Brooklyn Company amounts to only 20 cents per thousand cubic feet of gas sold, while the value of the appellee's land is three times as much, which is true. Land is of course more valuable in Manhattan than in Brooklyn, but appellant forgets that this Brooklyn company rents a substantial part of its real estate requirements. This decreases the value of the land owned by the company, but increases its operating expenses, and makes any such comparison less significant. The Kings County Lighting Company serves a large part of Brooklyn, an area where land is generally not so valuable as in the Brooklyn Union territory. The Kings County company's land values amount to 55 cents per unit of sales, as compared with 20 cents for the Brooklyn Union, and are nearly as much as those of the appellee, situated in the Borough where land is "too expensive."

The fact is that nothing appears in the records as to any one of these three companies to cast doubt upon the soundness of the excellent executive and engineering advice which has shaped their policies as to land and locations, under the varying conditions with which they have had to deal.

POINT THIRTEEN

THE 14TH AND 42ND STREET COAL-GAS PLANTS

Appellant's brief (pages 22-24) argues that the appellee's 14th and 42nd Street plants should not have been included in the "rate base" during 1922 and as of June 1, 1923, the date of the taking effect of the statute here under review. Late in 1923, the sites of these two plants were sold by the appellee, and they were subsequently dismantled. What the Master said concerning these two plants is at R. 92-93, which fully reviews the uncontradicted facts.

These two coal gas manufacturing plants, during the year 1922 and down to the end of October in 1923, when they were retired, were maintained by the appellee as necessary reserve or stand-by plants.

The undisputable necessity of such a reserve manufacturing capacity was demonstrated by the appellee and was admitted by the appellant Attorney-General's sole engineering witness (Mr. Little), who concurred fully with the views of Chief Engineer Woods in this respect, as will be more fully shown below. *The uncontradicted evidence in the case,* both on the testimony of the appellee's witnesses and on the testimony of the appellant Attorney-General's own expert, Mr. Little, *was thus that it was essential that there should be reserve manufacturing capacity of at least 20 per cent., and that even with these plants held as "reserve" or "stand-by" plants, the reserve capacity fell far below the minimum safe figure.*

The opinion of the defendant Commission

As to the necessity for these two plants in 1922 and most of 1923, it is not necessary to rely wholly upon the clear testimony of Mr. Woods or the admissions of the appellant's engineer. The defendant Commission, which by the New York statute is charged with the duty of keeping itself informed as to the "properties" of the appellee (P. S. C. Law, Sec. 66, Sub-div. 5), passed upon this question in its decision of August 30, 1922, and included both of these properties in its "rate base" in fixing a rate for 1922 and 1923 (R. 43-44), saying (R. 43) "the combined capacity of all the manufacturing plants of the Consolidated System Companies, including the 14th Street and 42nd Street plants, provide a reserve capacity which, in

the light of past experience, is no more than adequate for the practical requirements of uninterrupted service to the public," also pointing out that in 1923 the reserve might become insufficient, even with these plants still kept available. The Commission further said that (R. 43-44):

> "Should we eliminate the investment in those plants from the combined investment as stated above, it would be necessary to provide substitute plant capacity of adequate and modern design to the extent of about 10,000,000 cubic feet of gas per day, in order to maintain a reserve capacity deemed to be necessary from the standpoint of insurance against interruption of gas service in the City of New York. Such substitute coal-gas plant capacity would require an investment of at least $5,000,000, and the substitution of this amount in the investment of the companies would, of course, increase the aggregate investment as stated above."

In proposing to eliminate these two plants from the "rate base" during 1922 and as of June 1, 1923, appellant's brief does not follow the practical suggestion of the Commission that if the appellee had not had these two plants for stand-by purposes, it would have had to provide substitute capacity at an increased investment, at another site.

Review of the detailed testimony

Mr. Woods testified (R. 1145) that in his judgment the appellee's reserve manufacturing capacity should be maintained at approximately twenty-five per cent.; that at least when the reserve dropped as low as 20 per cent., building of new capacity should be immediately begun, for it would take about two years to build what is ordinarily the more

advantageous type of coal-gas unit (15,000,000 cubic feet of daily capacity) or of water-gas unit (36,000,000 cubic feet of daily capacity); and that during such construction period, the reserve might possibly drop as low as twelve per cent. (R. 1145-1146). Provision must be made not only for prospective increase in requirements, but also against the possibility of shut-down through accident. On the appellee's system, experience has demonstrated that the maximum increase in demand may in any season be 25 per cent. over the last previous maximum requirements (R. 1088). The company has no control over the quantity the patrons may use in a given winter, but must be prepared in any event to meet fully the maximum day's demand for gas.

In order to assure a continuous supply of gas to consumers, it is necessary for a gas company to provide a plant of capacity sufficient to meet the maximum requirements of the consumers at any given time with sufficient reserve for prospective increases and a reserve against a possibility of accident or enforced shut-down at a particular plant (R. 1083). The capacity of the 14th Street plant was 5,000,000 cubic feet a day; the capacity of the 42nd Street plant was 4,500,000 cubic feet a day (R. 1080).

The appellee's chief engineer (Mr. Woods) testified that in his judgment *these plants were economical units for the reserve purpose for which they were used, down to the time they were retired in 1923;* that it would not have been wise or prudent to have retired them before that time and that he would not have recommended it (R. 1149, 1272); that plans had in fact been drawn for equipping the 14th Street plant for all-year-round operation, if need be; and that the plant would never have been withdrawn nor the property disposed of if, in 1923, it had not proved possible to provide immediately equivalent manufacturing capacity elsewhere,

and in addition to acquire a suitable site for a new plant to provide additional capacity for the prospective requirements of the company; that until such substitute capacity was immediately assured at the 21st Street station, he would not and did not recommend the retirement of the 14th and 42nd Street plants (R. 1149, 1272).

On the cross-examination of Mr. Woods, the deputy attorney-general brought out even more clearly and conclusively, the used and useful character of the two plants. Mr. Woods said that *at the time these plants were retired in 1923 they were capable of making more gas than when they were originally installed* (R. 1168); *that they were kept in efficient operating condition so that gas could be made within a week's time;* that when he stated a week's time, he had gone the limit, for he had seen the benches brought to a heat in 48 hours. Gas was actively made at those plants in 1920, when it was needed in substantial quantity, and until such time as the D unit at Astoria was in full operation; that *on June 1, 1923, the plants were so equipped that they had the capacity stated, and they were ready for operation in the regular course* (R. 1240). At the 14th Street plant, all that would have been necessary would have been to fire the benches, make a connection to the exhauster house, and purge the lines while the benches were being heated; that the conditions of operation were such that the benches, due to the number of times that they had been previously fired and let down, could have been heated up very rapidly, in fact much more quickly than if the benches had been new; *they could have been brought to full heat in forty-eight hours under forced conditions* (R. 1240); that they could be making gas, easily within a week, and if conditions required, in much less time. In February and March of 1920, the company made about 4,000,000 to 4,500,-

000 cubic feet a day at each plant, as needed. In the winter of 1919-1920, the 14th Street plant was in active operation from December 28th to March 7th, and the 42nd Street plant from December 27th to March 6th (R. 1271).

After the completion of the D unit at Astoria early in 1920, it was not thought necessary (at least 30,000,000 cubic feet of additional daily capacity having been in this way secured) actually to fire up the 14th Street and 42nd Street plants as a matter of regular course for the winter requirements until this new capacity was more nearly taken up, as would soon be the case. But a week's time would have put them in a position to make gas as before (R. 1240).

Mr. Woods made clear that every bit of the equipment at these stations was capable of being used effectively in the production of coal gas down to the time of its actual physical dismantlement (R. 1271). ***In 1920, 42nd Street,*** which had a rated daily capacity of 4,500,000 cubic feet did *make as much as 4,202,000 cubic feet in a day;* and ***14th Street,*** which had a rated daily capacity of 5,000,000 cubic feet, *did make 4,820,000 cubic feet in a day* (Ex. No. 978; R. 1271).

In 1923, the appellee added at the 21st Street station new manufacturing capacity of 9,500,000 cubic feet daily, to take the place of the two stand-by plants, as this capacity would soon be needed on a year-round basis. It was actually provided by the winter of 1923, and plans also went forward for rushing the erection of a new plant at Hunts Point. Thereupon Mr. Woods recommended the abandonment and sale of the 14th and 42nd Street plants (R. 1272).

In the face of Mr. Woods' detailed and explicit testimony, both on direct and on an exhaustive cross examination, the defendants offered no testimony, other than the

simple negative of Mr. Little, unsupported by any reasons, that neither plant was useful to the appellee in 1923 (R. 1859). Mr. Little, on the other hand, testified that his judgment, like that of the appellee and its engineers, was that the company ought to have at all times a reserve manufacturing capacity of 20 per cent. or commence building new capacity (R. 1886-1887).

Appellant's unsound figures as to "unit cost of gas" at those stations

The appellant (Brief, page 23) appears to misunderstand the term "reserve" plant when he elaborates the fact that gas was not actually sent out from the 14th and 42nd Street plants in several recent years, and complains that, in terms of the quantity of gas actually sent out during emergency use in recent years, the annual cost of maintaining the plants gives a high apparent cost of gas per thousand cubic feet. That is a common characteristic of reserve and stand-by plants, and is inevitably so. Reserve represents the available margin of plant capacity to meet increased demand for gas or to serve as a substitute for other units of plant which may be temporarily put out of use. Such reserve was furnished by these plants. To keep plants in readiness, without actually sending out gas, during a greater part of the time, costs money, but is essential to continuity of service.

In this instance, however, the foregoing is not the complete, or even the principal, explanation. While the 14th and 42nd Street Stations were being maintained as stand-by plants, there were operated, at each plant, holder stations which were a part of the appellee's general system. These were in operation 365 days in the year—two large holders

at 14th Street and a smaller holder at 42nd Street. The "unit costs" computed by the appellant and represented as the unit cost of *gas manufacture,* cannot by any stretch of reason be accurately ascribed to the cost of making gas at those two plants. They include the cost of operating these holder stations, governor houses, etc., and this sum is divided into the small quantities of gas made during the period (in the winter peak) of the actual operation of the plants themselves.

These holder stations bore no relation to the manufacturing plants, except that they happened to be located physically upon the same property. The cost of maintaining these stand-by plants, might justly have been apportioned to the plants regularly manufacturing gas, whose costs benefited by the additional volume.

In such a tremendously serious matter as maintaining the gas supply in the City of New York, if these two plants bridged the gap in extreme weather *for one hour,* as they did for days, their existence was justified and vital. Even with the 14th and 42nd Street plants included as a part of the company's reserve manufacturing capacity, the reserve in 1923 fell far below the margin of safety which admittedly should be maintained. The contention of the defendants that these plants should be excluded from the property of the appellee used and useful in the gas business during 1922 and as of June 1, 1923, was unsupported by proofs and was properly overruled by the judicial officer who saw the plants and heard the witnesses.

Judgment of appellee's executives should control

We do not believe that this Court is in any position to review the "informed judgment" of the Commission in in-

cluding these plants as a part of the appellee's used and useful property, or even that it would have any reason or right to review the experienced judgment of the appellee's own officers and engineers on so technical an operating problem.

A reviewing Court or Commission is not vested with the functions and prerogatives of management, so as to substitute its business judgment for that of the company's officers; and, in the absence of a showing by the appellant that the appellee's officers and directors have been guilty of an abuse of discretion in keeping a prudent reserve of land and plant capacity available to enable it to meet future needs as and when they may arise, the appellee's actual operations, properties, expenditures, and executive determinations must be deemed to be reasonable and must be sustained. (See cases cited on pages 80 to 82, *ante.*)

POINT FOURTEEN

JUDGE HAND'S OPINION IN APPELLEE'S PRIOR SUIT (267 Fed. 231)

On pages 38 and 39 and again on pages 46 to 51 of his brief, appellant makes a plea that the Special Master and District Court should have employed in certain limited respects the modes of computation used by Judge Learned Hand in 1920 (267 Fed. 231). The Special Master explained very carefully why he did not do so (R. 140-144; see, also, R. 69-72), and Judge Winslow agreed with him; but the appellant insists that refusal to follow Judge Hand and Special Master Gilbert in these respects is only "*another evidence of the bias* of the Master below" (Brief, page 39). Appellant says that (italics ours):

> "it is *refreshing* to examine the conclusions reached by Judge Hand *after painstaking and diligent study* on the same subject matter" (page 39).

To members of this Court who were here in 1921, this plea will have a humorous aspect. The others may test the sincerity of this belated devotion to Judge Hand by reference to the record and the vituperative briefs of the appellants in this Court on the appeal from Judge Hand's decision (Case No. 257: October Term, 1921), in which not only was each and every finding and ruling of either the Special Master Gilbert or Judge Hand supporting the adjudication in favor of the appellee attacked by the Attorney-General, *but the appellants also charged that they had been denied a fair and impartial trial by both Judge Hand and Special Master Gilbert.*

In overruling as "*frivolous*" the Attorney-General's arraignment of Judge Hand's decision, this Court said (258 U. S. 165, 175):

> "Appellants earnestly insist that they were denied fair and impartial trial both by the Master and the Court. So far as relates to the Court we dismiss the suggestion as frivolous. * * * Looking at all the circumstances [of the hearings before the Special Master] we are unable to conclude that any substantial right was denied."

Appellant still refuses to respect Judge Hand's findings on questions of law or major questions of fact

It is interesting also to note that, with all of his present fulsome praise of a judicial officer whom his predecessor so frivolously denounced before this Court, the Attorney-General makes no plea that this Court should adopt Judge Hand's reasoned conclusion that the appellee is entitled to

earn *an eight per cent. return upon the full reproduction cost new of its property, without any deduction for any manner of depreciation* and that a "rate base" of $3.63 was "certainly too small" and should be $5.60 (267 Fed. 231, 236, 268).

Judge Hand's valuation at 1919 prices was $130,000,000

After recapitulating the "rate-base" figured, for the exigent purposes of that case, upon the basis that the value of the several properties was "*at least* their book value," at $64,196,533 (exclusive of franchises), Judge Hand said (p. 268):

> "This 'investment' therefore comes on a basis of nineteen billion feet to a capitalization of $3.36 per thousand cubic feet, or $3.63 with franchises included. *This is certainly too small.* Little swore that in 1914 it was the consensus of engineers that a water-gas plant would cost two dollars and eighty cents and that the present costs would be double that amount, or five dollars and sixty cents. Coal gas plants are much more expensive. *It is more than probable that the plaintiff's whole investment is, therefore, properly valued at one hundred and thirty millions at present prices, or twice what I have valued it at.*"

In discussing the proper measure of value, Judge Hand said, in his opinion (pages 236-238):

> "I have just said that the present range of prices seems to me applicable, not only to the cost of production but to the valuation of 'the rate base'; *i.e.*, the permanent means of production"

and that

> "The rule of the present reproduction cost, which is a necessary consequence of the foregoing argu-

ment, appears to me to have been either expressly or implicitly recognized in all the cases in which the Supreme Court has passed on these matters'';

Had the present Special Master adopted Judge Hand's rule of reproduction cost new as present value, he would have found a present value of at least $216,153,025.31 (Ex. No. 890 plus going value), that being the reproduction cost found by the present Master. Had the Master started with Judge Hand's 1919 figure of value at prices then existing, and had added net additions at cost, he could not have found the present value of the property used by the appellee as of June 1, 1923, to be so low as $134,101,738.77 (R. 201). Judge Hand's 1919 figure would have produced a 1923 valuation of at least $149,281,000 and in fact more.* The Special Master said (R. 116):

> ''In the gas rate litigation of 1919-20, Judge Hand found an investment value at that time (1918) of at least $64,196,533, exclusive of 'franchises and rights' and going value, and with a working capital of only $2,000,000 (although he stated that defendants' witnesses had said that twenty cents a thousand cubic feet was the minimum amount which should be allowed for it, which would have given $3,800,000 as the proper working capital at that time on such basis). He stated this investment finding of at least $64,196,533 was 'certainly too small,' that it was 'more than probable that plaintiff's whole investment at present prices was valued at $115,000,000,'* twice what he valued it at. *This figure was arrived at after excluding practically everything de-*

* The official Federal report gives the correct figure as $130,000,000 (267 Fed. 231, 268); the unrevised copies had shown an erroneous figure at $115,000,000. Had the Special Master, in this case, used the correct figure of $130,000,000, which Judge Hand intended and to which he corrected his opinion for printing, the 1923 rate base, on Judge Hand's basis of present value, would have amounted to at least $154,281,000.

fendants objected to, and cutting all values to the lowest possible figure, as he stated.

"Since the presentation of proofs in that case, the present investment in the various properties valued by Judge Hand, adding other properties now used by plaintiff in its gas business, has increased from $64,196,533 to at least $78,273,856.52 as of December 31, 1923, exclusive of working capital in excess of $2,000,000, and exclusive of going value and franchises. If the then present value of the properties included by Judge Hand in 1918 was $115,000,000* at that time and $14,000,000 has been added to it since then, it would make a present value of at least $129,000,000 plus the additional working capital I have found now necessary, and plus 'franchises and rights' and going value. Adding the working capital and franchises would make a value, exclusive of going value, of at least $140,281,000 at present prices, or, with going value included, of at least $149,281,000.

" Again, Judge Hand in finding that his computation produced a capitalization of only $3.36 per thousand cubic feet, or $3.63 with franchises, stated that it was too small, and that defendants' experts had sworn that at that time the cost of a water-gas plant would be $5.60 per thousand cubic feet, and that coal-gas plants would cost more. Colonel Miller in the present case swore that the cost of a coal-gas plant would be twice that of a water-gas plant. It thus appears that Judge Hand practically conceded that he had valued the plants at only a little over one-half a figure which he would have been justified by the testimony in the case in finding as its then value."

It will thus be seen that the "rate base" which counsel for the Attorney-General urges that this Court should adopt for all of the property used by the appellee is one which Judge Hand held was "certainly too small," and was

approximately $2.00 less, per thousand cubic feet of gas sold, than the then present cost of *water gas plant* alone, and considerably less than coal gas plant, of which the appellee has several units at Astoria.

Appellant refuses to respect Judge Hand's findings even as to the amount of the investment

In his present praise of Judge Hand, counsel for the Attorney-General fails also to tell this Court that the appellee's actual investment figures as found by the present Master, which the appellant tries to slash and cut most drastically on pages 31 to 37 of his brief, are only Judge Hand's investment findings as of December 31, 1918 (Ex. No. 828; R. 2355), plus net additions as shown in the schedule on page 50 hereof, *ante*, and that the defendant Commission based its $1.15 rate for the appellee specifically (R. 42) upon Judge Hand's investment findings plus net additions at actual cost to June 30, 1922 (R. 42).

We have shown under Point Six, *ante*, that the appellant contends for an investment figure as of June 1, 1923, which is less than the investment determined by Judge Hand as of December 31, 1918, although more than $15,000,000 (exclusive of investment in going value) of net additions to property had been installed since 1918. Appellant evidently does not care for Judge Hand's findings on *questions of fact*, but prefers his assumptions on questions of gas engineering and operating technique.

Judge Hand's computations as to operating expenses

Appellant may reply that he meant to praise only Judge Hand's observations as to operating expenses and that he

still means all the appellants said to this Court about Judge Hand and his "rate base."

Appellant's brief overlooks the fact that Judge Hand decided the prior suit upon *the issues and the evidence* which were before him, in a case where the defendants presented very full proofs as to what they thought the operating expenses should be, and in which counsel for the company failed to support with evidence certain items which Judge Hand questioned and disallowed but which were fully supported with evidence upon the present trial. The Special Master explained these differences in the issues and proofs very clearly (R. 69-72; 140-144).

To read Judge Hand's opinion, in conjunction with that of the present Master, affords the best way of refuting the appellant's assertions. When Judge Hand was making computations to find out whether the 80-cent rate could be sustained *if he resolved all possible doubts against the company,* he took the Astoria cost, because at that time it was lower than that in Manhattan. He did not, however, exclude the Manhattan plants from his "rate base" or their expenses from his operating costs. Furthermore, upon the trial before the prior Master, the appellee put in evidence exhibits showing the cost of manufacturing gas at its own plants in Manhattan; it also put in evidence the vouchers showing the amount paid to The Astoria Company for gas purchased. The defendants demanded access to the books of The Astoria Company, and the *defendants* compiled exhibits showing the costs at the Astoria coal and water gas plants which they put in evidence.

In order to eliminate the possibility of any question being raised in the reviewing courts, as to the sufficiency of the proof of the manufacturing costs, the Master, in reaching his decision, adopted the cost at the Astoria plant,

in order that he might use the basis and the exhibits offered by the defendants themselves. Judge Hand followed suit. He found, however, that the Manhattan water gas plants used fewer pounds of generator fuel than the Astoria. He thought this was evidence of greater efficiency in the Manhattan plants and made a slight deduction from the Astoria cost accordingly. He was mistaken, as the proofs in the present case show more clearly. Both plants were equally efficient, but Astoria was using coke in the generators and Manhattan was using coal. It required more pounds of coke than of coal, but coke was cheaper, which offset this. There was no difference of fact or opinion between the engineers for either side, on this point.

The first thing Judge Hand tried to do, apparently, when he found himself confronted in mid-summer with the enormous record of 17 volumes of testimony and exhibits was to find out whether, in case he resolved practically every disputed question in favor of the defendants in the case, the 80-cent rate could be sustained. He found that it could not be, and proceeded to demonstrate it by showing the reductions which, for the purpose of this test, he had made in the expenses, as the result of resolving in favor of the defendants every question relative thereto about which there could be any shadow of doubt, by methods which he himself alluded to as "severe treatment," and as "against any possibility of error," and such as he stated would be "unfair" to the company "in the future in fixing a rate," and in accordance with the Court's "plan of resolving all doubts against the plaintiff," concerning which he finally said (267 Fed. 231, 269):

> "In the figures I have used I think it clear that everything has been pared down unsparingly and I take this occasion to say what I have already alluded to more than once already. It would be most un-

> fair to accept any of these figures in fixing a rate. * * * Furthermore, I have not hesitated to cut more ruthlessly in this case than if the result had been closer."

Judge Hand did not question the actuality or reasonableness of the whole of the appellee's operating expenses, or of the use of all the property owned by it or allocated by others to its use. He said:

> "I have not found it necessary to consider in most cases what were the actual facts, but only whether *with every allowance* they could support the rate."

His preliminary computations gave him a 1919 cost of 68.22 cents, but he fixed for the appellee a rate of $1.20, computing 32 cents of that sum as required for an eight per cent. return on investment leaving 88 cents as his evident estimate of the fair actual operating cost. On these bases, he thought the company entitled to charge $1.20.

Changes in operating conditions since 1919

Changes in the prices of materials and labor since 1919 have operated to bring the costs at the Manhattan plants and the Astoria plants closer together than they were at the time of the prior suit, with the comparison now slightly in favor of the Manhattan plants. Mr. Woods showed in his tables and testimony, which are discussed under Point Three of this brief, that, taking the whole period under review in this case (that is, from January 1, 1922, to April 30, 1924), the cost of production at Astoria was 0.51 cents per thousand cubic feet of gas made, *in excess of such costs at the Manhattan plants, after giving effect to return on investment and taxes on property devoted to the manufacture of gas* (Ex. No. 1035; R. 2845-2849).

As shown under Point Twelve, *ante*, no contention was presented on the trial of the present case, by either of the defendants, that the present Manhattan plants of the appellee are not used and useful in its gas business and should not be included in its "rate base." If such a contention were made, provision in the "rate base" and in the rates would have to be made, as Judge Hand pointed out at page 261 of his opinion, for substitute plant capacity at Astoria which, according to Mr. Little's estimate of future cost of manufacture at Astoria (Ex. No. 95), would have to consist in large part of a coal gas plant, entailing an investment of twice as much as that now in the Manhattan plants (R. 1082-1083; 1183).

Differences between the present and former proofs as to distribution and general expenses

Furthermore, many of Judge Hand's eliminations were based on the record before him, and his inability to find therein proof to sustain such items. In the present record, these supposed deficiencies of proof were completely remedied. For example, with regard to repairs to meters and appliances, he said (p. 253):

> "I have not been able to find what the Standard's profit is on this work, but it is scarcely necessary in the case of so small an item. If I assume that the profit was ten per cent., as it is on the sales of gas between companies, there would result a deduction of Twenty-nine thousand three hundred and twenty-two dollars for 1918 and Twenty-four thousand one hundred and twenty dollars for 1919. I shall so take it."

The reason Judge Hand was unable to find what The Standard Company's profit was on the work, was that no such

profit was included in the charges made to the appellee. In the instant case, the evidence discloses fully the basis of the charge by The Standard Company for repairs to meters and appliances, and shows that no such profit has been included (R. 825-826).

As to the item of expense for salaries and supplies at the general office, Judge Hand said (pages 253-254):

> "The method suggested of dividing in accordance with the income has few advantages except that it is an intelligible theory and has at least some relation to the facts. *I shall adopt it, but only because I am taking all doubts against the plaintiff.*"

There was no evidence in the present case that any time was devoted by the executive officers of the appellee to the non-gas business which diminished the time they might otherwise devote to the gas business. Mr. Woods testified that there were distinct benefits and advantages to the appellee in maintaining a close contact between the appellee's technical operations and those of the affiliated companies (see review of Mr. Woods' testimony in this respect under Points Fifteen and Sixteen of this brief).

As to general office supplies and expenses, Judge Hand said (page 254):

> "I apportion these, very roughly it is true, by deducting that percentage of the whole which the deduction from the preceding item bears to the whole item; that is, I deduct, Twenty-three thousand five hundred and nine dollars for 1918 and fifteen thousand three hundred and sixty-one dollars for 1919."

As to the item of miscellaneous general expenses, the only deduction which Judge Hand thought proper was the item of emergency defense service, which was an extraordinary expense, incident to the war period.

In the prior case, the defendant Public Service Commission presented extended evidence as to what in its judgment should be deducted from the appellee's general expenses, as applicable to non-gas operations. Dr. Adna F. Weber, Chief of the Commission's Bureau of Accounts, was called in behalf of the Commission to give testimony along these lines. In the present case, however, no such testimony has been presented in behalf of either defendant, but, on the contrary, the evidence brought out during the appellee's direct case dealt with the points developed by Judge Hand and left no basis for such deductions (R. 800). So the present Master did not make them, but made some others.

The Commission did not follow Judge Hand as to operating expenses

Any contention that Judge Hand's mode of computations should be followed, although the conditions which gave rise to them no longer exist, is repudiated by the action of the defendant Commission itself when it fixed the $1.15 rate for the appellee. The Commission, in its decision (R. 44), frankly declared that the rate which it fixed was not then regarded by it as sufficient, and that the appellee was entitled to a return upon the present value of its property rather than upon the original investment therein. It calculated the rate which it prescribed upon the allowance of all of the operating expenses of the appellee as shown in the schedules submitted to it similar to the schedules presented by Mr. Teele and Mr. Nickerson and received in evidence in the present case (Exs. Nos. 813, 816, 888, 889, 1017), but a return only upon the original investment in the property as found by Judge Hand plus net additions; and the Commission justified its reduction in the rate of $1.15

by the anticipated saving in the cost of gas oil by reason of the change in the standard from 22-candle power to a 537 average B.t.u., and the anticipated recession in prices of labor and material entering into the appellee's operations, which, however, were not realized.

POINT FIFTEEN

TRANSFER-OF-GAS SYSTEM AND INTER-CONNECTION OF MAINS

In view of the appellant's effort (Brief, pages 25-31) to create the impression that there is something arbitrary, unreasonable, and uncertain about this transfer-of-gas system and joint use of some property, we shall briefly review the facts, although the *best* answer to his innuendoes is the *combined* costs of all the system companies, which is shown on page 63, *ante*, with all the intercompany charges for use of property eliminated. That statement shows that the *system* costs correspond closely to the appellee's, which confirms the fairness of the arrangement and the equitable distribution of the costs.

First let us say that there is nothing ulterior, mysterious or unfathomable about this inter-connection of mains and the bases of payments for gas and for such properties as are jointly used. The economies and advantages of the inter-connection are very great, as hereinafter shown, and every effort has been made to make the bases of payment accurate and equitable, according to the facts of use, with no undue burden put upon any company or its consumers. The "Woods' reports" (Ex. Nos. 765, 766; R. 1112) represent a competent and conscientious effort to provide a fair

basis, according to the best engineering and executive judgment available in the staffs and directorates of the various companies. The appellee has repeatedly taken the position, before the Commission and the Courts, as it does now, that if anyone can suggest any change which will make the system of inter-company charges any more accurate or equitable, any such suggestions will gladly be adopted. Until the Commission has some criticism of the present bases, and until some one suggests a way of improving them, appellant's criticisms lack pertinency.

Appellant's discussion of this subject, under the heading "Improper allocations increase the rate base" (page 25), shows a failure to understand the facts or an unwillingness to state them fairly. Appellant says (page 25):

> "How much gas is made in the system is known, how much gas is consumed is known. Beyond that nothing is known or can be known."

Such a mis-statement can only be the product of a failure to read this record, as we shall presently demonstrate in detail. Every fact and factor necessary to a just and reasonable determination is known and is taken into account, in determining the inter-company payments for gas and for use of property.

Appellant affects a complaint that the operating expenses of the gas business are not now stated in the manner followed in the 1906 case; viz., that the appellee should state its operating expenses *per books*, by including in them the sums paid by it to other companies for gas purchased and for use of property, and then confining its "rate base" to the property owned by itself. That method of proof was continued by the appellee in its 1919-1920 case, but was abandoned by that Special Master and District Court

upon the insistence of present counsel for the appellant and his colleagues. The 1920 findings were before this Court on *both* bases, and the appellee presented its proofs in the present case on both bases. The *Teele* exhibits (Nos. 813 and 816; R. 2316-20; 2330-34) are in the form now suggested by the appellant; the *Nickerson* exhibits (Nos. 888, 889, 891, 892, 893, 895, 896, 897, 898, 1017, 1018, etc.) are in the form which the appellant has hitherto urged. None of the defendants, in any of the rate litigation affecting the appellee or its system companies, has placed in evidence any statement of operating expenses made up on the basis now urged by the appellant.

Appellee rather agrees with the appellant's present view that the actual expenses per books are the better basis; but, as pointed out on pages 15 and 16, *ante*, does not make much difference whether the appellee's operating expenses are so stated to show its payments to other companies for purchased gas (at actual cost with eight per cent. return on the property used) or whether the property of the other companies so used in making gas for the appellee is placed in its "rate base" and allowed to earn an eight per cent. return thereon, over and above operating expenses from which all return upon property has been excluded.

On the basis now argued for by the appellant, Mr. Teele's exhibits show that the appellee's actual operating expenses were $1.0607 per thousand cubic feet in 1922 and 94.06 cents in 1923 (Exs. Nos. 813, 816; R. 2316, 2333). The $1.00 rate is just as confiscatory under this mode of statement as another; the *form* of the statement cannot change or conceal the costs of labor or materials or add to or decrease the amount of property actually used.

The appellant's failure to understand the matter is shown by his assertion that the accounting bases for which

he and the other defendants have hitherto contended, operates "most unfairly to Consolidated consumers" (page 26). He says it is "obvious" that "the only fair way to do it is to take *all* the joint facilities, which really include plants as well as holders, transmission mains, tunnels, etc., *and divide them among the various companies on the basis of annual sales*" (page 26).

Appellant is right that "this is not done," but he is not right in saying that "if all the property were pooled and the Consolidated were given in its rate base only its share of the total the result would be far less than it is obtained by the present method." The unit investment of the appellee is $4.06 (Ex. No. 888; R. 2800; side folio 4096); the unit *investment* of the system companies is $4.39 (Ex. No. 891; R. 2800; side folio 4134); the same ratio would apply as to present value. If the basis now urged by the appellant were employed, the result would be *higher charges to the appellee's consumers for the use of property.*

For example, Mr. Woods showed that the appellee was actually paying the carrying charges on 59 per cent. of the investment in the jointly-used transfer mains, based upon the figures of his reports (Exs. Nos. 765, 766; R. 1112), whereas, if the appellee's portion of these transfer mains were determined by its ratio of sales to the total sales of the system companies its portion would be 64 per cent., as its sales were about 64 per cent. of the total sales (R. 1234).

The Commission sustains and follows the bases adopted by the companies

Appellant indulges in a good deal of loose and uninformed criticism or innuendoes concerning the interconnection system in the appellee's territory. The same asser-

tions were made by counsel before this Court in the prior suit, and were not sustained. The defendant Commission has had, since 1907, plenary jurisdiction over the operations, properties, accounts and practices of all these companies and their relationships *inter se*. It supervises their costs, their accounts, their contracts, and their rates. Each of these annual Joint Facilities Reports by Mr. Woods, stating the facts known to him as to the properties and their use and recommending to the directors of the several companies an equitable basis for apportioning the charges according to the use made of the properties by the several companies is filed with the Commission. If there were any such grievous faults and glaring injustices in this system as the appellant claims, the Attorney-General can hardly say that the State Commission would have tolerated them, have adopted their results as the bases for our reports to the public and its decisions, and awarded to the companies rates based upon these allocations.

At page 27 of his brief, the appellant insinuates some ulterior motive in the fact that the appellee pays for 80.07 per cent. of the Astoria manufacturing capacity, whereas it pays only 56.44 per cent. of the charges for the tunnel facilities. Judge Hand, in the prior case, as shown on page 51, *ante*, charged against the appellee *all* of the expenses of the Astoria tunnel, but the appellee's own basis of 56.44 per cent. conforms to the actual facts of the present use (R. 1112, fol. 1698), of the tunnels. To meet the gas requirements of its consumers, the appellee required the use of 68,864,000 cubic feet of daily manufacturing capacity from other companies (R. 1112, folio 1684). To meet this demand, The Astoria Company had available capacity of 85,943,000 cubic feet, and The New Amsterdam Company 9,441,000 cubic feet. Obviously the appellee could obtain

but a small portion of its supplementary capacity, in any event, from the amount available by The New Amsterdam Company.

The carrying charges for the tunnel facilities were apportioned between the companies of the system, in the ratio of each company's demand upon the plants located on Long Island to the total demand upon the Long Island plants, of which demand the appellee's proportion was 56.44 per cent. (R. 1112, folio 1698).

That this percentage as to the tunnels must be different from the percentage of Astoria manufacturing capacity required by the appellee, is obvious from the fact that out of its manufacturing capacity devoted to its own use, The New Amsterdam Company supplies gas to its own consumers in Manhattan from its own plant on Long Island, thereby making a demand upon and use of the tunnel facilities.

The appellant's claim that the appellee's "rate base has been increased by $2,845,000" based on investment or $4,000,000 based on present value (Brief, page 28) by the assignment to the appellee's needs of the reserve capacity at Astoria, instead of the excess capacity of the New Amsterdam plant, is another instance of his wrong conclusions based on misapprehended facts. There is, and can be, no evidence that the total cost of gas (taking into account *both* the operating expenses and the carrying charges on the property employed) supplied by The New Amsterdam Company, is any less than that supplied by The Astoria Company, or that the appellee suffers from its purchase of plant capacity and gas from the latter. The proof shows that the Astoria plant is equipped mechanically with labor-saving devices which are not justified in a smaller plant, and the result is a higher *investment* per unit of output, with a corresponding saving in the cost of operating labor.

Appellant's discussion of the reserve requirements of the companies (Brief, pages 28-29) is based on lack of knowledge of the practical conditions of a great industry. The "peak load demand," and not the annual volume of sales, is the governing factor as to the required reserve capacity. Increased population is only one factor of increased demand; intensified industrial business is another. The point made that "the population of Manhattan Island is decreasing, while the population of The Bronx and Queens is increasing by leaps and bounds" and that gas consumption will follow similar course, is not borne out by the record of sales. From 1921 to 1925, the appellee's sales increased 10 per cent., as compared with 12.8 per cent. for all the system companies. During the same period, the maximum twenty-four hour demand increased by 18.8 per cent.

An erroneous statement is made (page 30) that the appellee does not need to use the 48-inch main in The Bronx. This main connects the western (Bronx) end of the Astoria tunnel with the Kingsbridge holder, which holder in turn is the source of supply for a large part of the consumers in upper Manhattan. This is the direct route by which the gas comes from the Astoria plant to upper Manhattan. The two other companies in that part of The Bronx also receive gas by this route, and would have to have a 30-inch transmission main there for their own requirements (R. 1233-34). This 48 inch main thus meets the needs of the three companies at a minimum cost to each in investment and carrying charges. The adoption of the 30-inch size as a basis of the charge to the Central and Northern Union companies is merely a method of determining an equitable apportionment to those companies, with due regard for some margin of reserve maintained for each company.

The interconnection of mains and transfer-of-gas system described

Having replied to the appellant's criticisms, we will now discuss the affirmative aspects of this system:

The gas companies comprising the transfer-of-gas system are the appellee, The Astoria Light, Heat and Power Company, The Standard Gas Light Company, The New Amsterdam Gas Company, The East River Gas Company, The Central Union Gas Company, and The Northern Union Gas Company. The appellee owns, directly or indirectly, nearly all of the voting stock of the other companies (R. 74-75). Before their acquisition by the appellee (R. 1097-1098), the plant and distributing system of The Mutual Gas Company were connected with the system (R. 1108), as they still are, under their present ownership.

The plants and holder stations of the appellee and the plants and holder stations of The Astoria Company and the affiliated gas companies are interconnected (R. 1090). The purpose and effect of the interconnection is to avoid such waste or duplication of plant and other property as would be involved if these companies were operating independently (R. 1090).

Prior to 1900, the gas companies in Manhattan and The Bronx were operating independently and in competition, and since that time they have been progressively interconnected, with a view to avoiding duplication of investments by the different companies. There have been other practical and actual advantages, in the centralization which has afforded economies in operating cost in the joint use of mains, services and other facilities, and in the purchase of supplies and materials (R. 1091).

There has been a standardization and an improvement in the quality of service, especially in the maintenance of

better distribution pressure. If each of the gas companies were separately owned and separately operated in this territory, the aggregate investment necessary to render service would be much greater than the amount of the investment as it now stands. There is also an economy and advantage in service in the purchase of materials in substantial quantities for the several companies (R. 1095).

The storage holders and the gas mains of the appellee and the affiliated gas companies on the transfer system have gradually been tied in and connected. As a result of the tying in or the connection with the gas mains and plants, it is not possible to identify the sources of the gas in the holders and gas mains as having been manufactured at any particular plant or by any particular company. After the gas is manufactured, it is sent into the distributing system and no attempt is made to ascertain and determine the specific sources of the gas in the system (R. 1091-1092).

Through the supervision over coal and oil used at the several plants and over the operation of the plants, the appellee is able to assure that gas of acceptable quality is received by it on purchase as well as manufactured by it (R. 1092).

Mr. Woods described how the pressure of gas affected the direction and flow of gas coming from the several plants and how such pressure was controlled (R. 1094-1097).

If each company on the transfer system had sufficient plant manufacturing capacity of its own, to meet all of its requirements, including a reserve, there would still be a certain amount of exchange of gas, as a result of the interconnection of the mains, and there is flow and exchange of gas that arises from no other cause than variations in pressure (R. 1094).

Even if each company on the transfer system had its own plant capacity in an amount to meet its own maximum day's requirements and an allowance for reserve, the interconnection of mains would still be economically justifiable and desirable (R. 1095). There would still be an operating advantage as to flexibility and economy in the transfer system, and as to dependability of a continuous supply of gas (R. 1095).

The amount of gas exchanged among the companies on the transfer-of-gas system is not a matter of exact control, for it depends upon the demands of the consumers for gas in different parts of the territory (R. 1089).

The manufacturing department of the appellee has the responsibility and supervision to see that enough gas is manufactured to meet fully the demands of all the consumers of all the companies on the transfer system, including unaccounted-for gas and gas used by the companies (R. 1096).

The appellee and its affiliated companies have mains which are used exclusively for transferring gas from one point to another, and these mains are interconnected (R. 1097-1098-1099; Plaintiff's Exhibit No. 832). The location of the appellee's transfer mains was described by Mr. Woods, at R. 1098-1099. By means of this transfer system of mains the manufacturing plants situated in Manhattan, The Bronx and Long Island City are interconnected so as to make their manufacturing capacity available to each other (R. 1098-1099).

As a part of the interconnection of the mains and plants of the companies of the transfer-of-gas system, are certain tunnels built between Long Island City and the Boroughs of Manhattan and The Bronx, one known as the Ravenswood

Tunnel, from the foot of Webster Avenue in Long Island City to the foot of East 71st Street, Manhattan, and the other known as the Astoria Tunnel, from the southwest corner of the property at Astoria in a northwesterly direction to the foot of East 132nd Street in The Bronx, both of them belonging to The East River Company (R. 1099).

Bases of inter-company charges for gas transferred and use of facilities

Out of this coordination of facilities and operations of the several companies on the so-called transfer-of-gas system, there has developed a system of inter-company charges. These inter-company charges are made for services and materials, gas transferred or the use of facilities jointly used. The basis of the charges is the cost of labor and materials used in the manufacture of the gas furnished by one company for the benefit of another, the maintenance cost of the property used, the carrying cost of the property used at the prevailing rate of return on the investment devoted by one company to another, and in some cases a moderate charge for undistributed expenses (Woods, R. 1091).

Plants on the transfer-of-gas system and operating conditions at such plants

In the plants of the appellee and its affiliated gas companies coal gas and water gas are produced. Prior to the withdrawal of the 14th and 42nd Street plants, the appellee made both coal and water gas, but at the present time the appellee makes only water gas; The Central Union Company makes both coal and water gas; The Astoria Company makes both coal and water gas, and the balance of the

plants in the system produce carburetted water gas. The coal gas embodied in the send-out of the appellee is obtained primarily from The Astoria Company (R. 1078).

About 85 per cent. of the total gas produced in the system is water gas, and about 15 per cent. coal gas (R. 1078).

There is no constant comparative relation between the cost of coal gas manufactured and the cost of water gas manufactured. There are no means of knowing what the cost of coal gas would be and what the cost of water gas would be, and, therefore, there is no constant comparative relation between the two.

There may be times when coal gas can be produced more economically than water gas, and at other times the situation may be reversed. There is no way of keeping the cost of the two gases upon a parity so far as the manufacture is concerned. The costs entering into the manufacture by each process fluctuate as the costs of the principal elements entering into each fluctuate (R. 1078-1079).

The availability of both methods of manufacture to the companies on the transfer-of-gas system and their consumers tends to produce economies, to the extent that the capacities of the respective plants for producing one or the other kind of gas renders such economies possible (R. 1079).

Mr. Woods, vice-president of the appellee, formerly its chief engineer and engineer of gas manufacture, explained such variances as develop in the production cost at the respective plants of the appellee and the plant at Astoria and the plants of the affiliated gas companies (R. 1178-1182, 1260-1261). The efficiency of labor and of materials varies, and even to the extent of labor varying on the three different shifts of the day and with different days and other dif-

ferent periods of time (R. 1079-1080). Therefore, the operating results of the companies of the system can only be and are judged by the averages in all the plants rather than by figures for a short period of time in a single plant (R. 1080).

The details of the inter-company charges are given on pages 213 and 214, *post.*

Transfer of gas by one gas company to another

As a result of the interconnection in the system, it happens that one company may produce, at a given time, more gas than its consumers require and in like manner, another company may produce less gas than its consumers require. The total send-out of all the companies in the system, however, is not any more than that necessary to meet the requirements of all the companies in the system (R. 1099).

In order to arrive at the actual requirements of each company in the system during any specified period, it is necessary to consider the quantities of gas made at all of the plants in the transfer system. Each company keeps account of its own consumers' meters and the gas consumed through these meters. Each company also keeps account of the gas used by it. In making the allocation of the gas requirements, the following matters are also taken into consideration:

Three per cent. of all gas sent out from all manufacturing stations is estimated to be lost or unaccounted for through slow meters, temperature of the gas at point of registration on consumers' premises, stolen gas and con-

densation, which amount is allocated to each company on the basis of the ratio of its gas sales and gas used to the total sales and used of all companies.

The remaining unaccounted-for gas, attributable to losses on mains and services, is allocated to each company on the basis of its percentage of miles of mains to the total mileage of mains of all companies in the transfer system. Thus, we find the companies' requirements to be:

(1) The actual sales to its consumers;

(2) The actual amount used by the company;

(3) The amount charged to them for loss due to consumers' meters;

(4) The amount charged to them for losses by condensation, leakage, etc., of mains and services.

The total of these amounts of each company, namely, gas sold and used, unaccounted-for due to loss in consumers' meters, and unaccounted-for due to loss in mains and services, represents the requirements of each company, the total requirements of all companies being the combined send-out of all companies (R. 1100).

Reports are made by each of the companies of the transfer system to the chief engineer of the appellee, as well as to the secretary and officers of the appellee showing the quantities of gas made, sent out, sold, used and on hand, and daily, weekly and monthly reports of the operation of the plants and stations of the several companies are likewise made (R. 1102-1103).

The five important factors in connection with the gas transactions of each of the gas companies in the transfer system are:

(a) the quantity of gas on hand;

(b) the quantity of gas manufactured;

(c) the quantity of gas sent out;

(d) the quantity of gas sold;

(e) the quantity of gas used by the company.

At the manufacturing plants of the appellee and its allied companies, hourly records are kept of the quantity of gas made as recorded by the station meters. At all of the manufacturing plants and holder stations hourly records are kept of the quantity of gas "on-hand" as determined by the holder measurements, *i.e.*, by the elevation of the holder.

Records are also kept of the hourly "*send-out*" the basis of which is the hourly "*make*" augmented by the reduction during the hour of the quantity of gas in the holders or diminished by the increase during the hour in the quantity of gas in the holders.

Daily reports of the details of the manufacture and "send-out" of gas by each of the gas companies of the Consolidated system are filed with the appellee, and monthly and periodic statements are similarly made of the operating details of each company.

The factors used in calculating the quantity of gas interchanged among the companies in a calendar month are based upon the following:

1. The amount of gas *sent out* by each company's manufacturing plants.

2. The amount of gas accounted for by each company as being sold to its consumers and used in its offices and plants.

3. The difference between the aggregates of items "(1)" and "(2)" indicates the total amount of gas *unaccounted for* by all companies.

4. The unaccounted for gas is distributed among the companies, so as to apportion to each company the unaccounted for quantity attributable to the distribution of gas for its own consumers.

5. Combining the amount of gas accounted for by each company (2) and the amount of unaccounted for applicable to its gas business (4), gives what may be termed the total *requirements* of each company.

6. Comparing the amount of gas *sent out* by each company's manufacturing plant (1) with the same company's total *requirements* (5), indicates which is a *creditor* and which is a *debtor* company, the agreement under which gas is interchanged indicating the particular creditor company to which each debtor company is a debtor.

7. The creditor company bills the debtor company for the amount of gas shown by the foregoing computation to have been manufactured by it for such debtor.

The other companies of the Consolidated transfer-of-gas system take and pay for all of the gas sent out by The Astoria Company, excepting that used by The Astoria Company in its plant and a small quantity sold to a few consumers in the immediate vicinity of the plant, and have done so since The Astoria Company began manufacturing gas in December, 1906. For the purpose, therefore, of all computations, designed to determine the exchange of gas between the appellee and its other allied companies, all of the gas sent out for other companies by The Astoria Company is included in the "send-out" (R. 1104-1105).

Mr. Woods furnished an example or illustration showing in detail the method of calculating the gas requirements of the several companies of the Consolidated transfer system (R. 1106-1108).

Jointly-used properties and facilities

In the manufacture and distribution of gas, the appellee uses properties or facilities which belong to other gas companies affiliated with it, and, to a certain extent, other gas companies use facilities which are owned by the appellee but which are used in the service of the consumers of such other companies. The companies are those named on page 197, *ante*.

The appellee pays the owner company for its use of facilities owned by such company but devoted wholly or in part to the service of the appellee's consumers, and, in turn, charges other companies for their use of facilities which belong to the appellee but which are used in whole or in part in the service of consumers of such other company or companies (R. 1108).

It has been the duty for the past ten years of Mr. Woods, then chief engineer of the appellee, to ascertain the extent of the use of these properties and to recommend to the officers of the different companies what, in his opinion, such payment should be. He has made his recommendations in the form of a report submitted each year, giving the investment and the carrying charges on the investment and the allocation of those charges to the different companies (R. 1108-1109).

Such reports were made by Mr. Woods covering the charges for the years 1922 and 1923 (Plaintiff's Exhibits Nos. 765 and 766; R. 1109).

In these reports, Mr. Woods set forth what, in his judgment and to his knowledge and experience, are the requirements of each gas company with respect to the facilities jointly used, the amounts representing the original investment in such jointly used properties, the carrying charges upon such properties, and the reasonable allocation of such charges to each company, in detail, all of which is fully explained in the reports (R. 1109).

The reports were examined by the officers of each of the gas companies interested, and the accredited officer of each company went over the report with Mr. Woods and concurred in its recommendations before they were submitted to the boards of directors of the several companies (R. 1109), and the appellee's Executive Committee and Board of Trustees adopted the reports.

The reports covering the carrying charges for 1922 and 1923 (Plaintiff's Exhibits Nos. 765 and 766), are set forth in full at R. 1111-1112.

The properties of other gas companies devoted to the use of the appellee's consumers, which are covered by these reports of Mr. Woods, are principally, the Astoria plant of The Astoria Company, the Astoria and Ravenswood tunnels and transfer mains in Long Island City and Astoria, and the 62nd Street governor and boiler house and the 48-inch Harlem River main of The Standard Company.

The rates charged on investment to each of the system gas companies, for the use of its properties by other companies as apportioned and set forth in Mr. Woods' joint facilities reports for the years 1922 and 1923, were as follows (R. 1111-1112):

Included in the total rate charged per annum on property, under Mr. Woods' Joint Facilities Reports

Year 1922

	To provide for return on property	To provide for taxes	To provide for maintenance and repairs	To provide for insurance and retirement expense	Total rate charged
For Use of					
Mfg. capacity (incl. holders and eqpt.)	8%	2½%	...	1¼%	12%
Land for same	8	2½	...	.....	10½
Working capital	8	...	...	.....	8
Mains and tunnels	8	2½	2%	1½	14

Year 1923

For Use of					
Mfg. capacity (incl. holders and eqpt.)	8%	2½%	...	¼%	11%
Land for same	8	2½	...	.....	10½
Working capital	8	...	...	.....	8
Mains and tunnels	8	2½	1%	¼	12

Mr. Woods furnished a comparison of the amounts included in the charges for the use of joint facilities belonging to the Astoria, New Amsterdam and East River companies to provide for taxes, maintenance, insurance and retirement expense, with the actual cost thereof for the years 1922 and 1923.

For 1922, the excess of the amount provided for in the rates fixed by the joint facilities report for carrying charges on plant, etc., of The Astoria Company devoted to the use of other companies, outside of return on investment was $189,767.57, whereas, for 1923, the actual costs exceeded the amount provided for in the rate charged, by $157,001.01. In the case of the New Amsterdam and East River companies, the amount charged for 1922 exceeded the actual cost by $110,945.89, and in 1923 the actual cost exceeded the revenue received by $2,055.48 (R. 1226). Mr. Woods explained that the rates for operating charges were intended to provide for "a fair average operation covering a period of time."

This method of computing the rates by average costs, rather than by the costs of a particular year, is unavoidable, especially in the case of tunnels, where the maintenance and retirement expense for one year may be slight, but, after the elapse of a period of time, may be very substantial (R. 1236-1237).

The revenue from the use of joint facilities by other companies, in excess of the percentage of return on investment, is credited to the operating expenses of the owning company (R. 1229).

No prejudice, however, resulted against the appellee from the application of the rates fixed by Mr. Woods' reports. If Mr. Woods had used, for the year 1923, the actual costs applicable to the jointly used facilities used by the appellee, the appellee's operating expenses would have been increased by almost $150,000, over what they were according to the appellee's books (R. 1229).

The allocation of investment, and the determination of charges thereon, in jointly used facilities is based by Mr. Woods upon the amount of such investment at the end of the preceding year, that is, the allocation of investment and charges for the year 1923, was based upon the investment as of December 31, 1922. Any investment made by any of the companies during the next year after the date as of which the investment is fixed is not taken into account in the determination of the allocation of joint facilities and the charges thereon until the end of the year, so that, during a portion of the year, the companies carry a part of their investment made during the year for which no compensation is made by the other companies until the following year (R. 1212).

Although the charges for the use of joint facilities are

based either upon book cost or upon an estimate of original cost of the facilities, and none of the allocations of charges are predicated on present reproduction cost, Mr. Woods testified, nevertheless, that if the appellee were permitted to secure a proper return on gas at a price which would justify it in asking for a return on the reproduction cost of its own properties, he would recommend that for the use of joint facilities the affiliated companies should also pay for property at present reproduction cost, and that at the present time the rates for gas did not permit such a recommendation (R. 1211).

Kingsbridge Holder—The joint use of the Kingsbridge holder, and the basis of the apportionment of its use, were explained by Mr. Woods at R. 1230, 1231, 1234.

The only allocation for holder capacity which is made among the companies under Mr. Woods' joint facilities report is that at the Kingsbridge holder station of the appellee and the 63rd Street pumping station of The Standard Company (R. 1969). The other holders of the system companies are used interchangeably. The Standard Company has a 10,000,000 cubic foot holder capacity at the 63rd Street station, which is sufficient for its entire requirements, but the appellee uses a part of that capacity, and in turn allows The Standard Company to use the appellee's holder capacity at its 111th Street station. The same thing applies to The New Amsterdam Company. Mr. Woods testified that the system companies possess holders to meet their own requirements, but that, for convenience and proper distribution, each holder does its part in maintaining proper supply and pressure over a given district and may supplement what is done by the holders of other companies therein. Where, however, a portion of a holder of one gas company is devoted to the use of another

gas company which has not sufficient holder capacity of its own, the extent of such joint use is covered in Mr. Woods' report and a basis of payment set up; but when it is a mere matter of exchange between the gas companies of some holder capacity or pumping facilities, then Mr. Woods does not treat it as a matter of inter-company charging.

POINT SIXTEEN

INTER-COMPANY CHARGES AND THEIR APPORTIONMENT

Apart from charges made by one gas company to another in the transfer-of-gas system for gas transferred or facilities jointly used, as already indicated under Point Fifteen, other services are from time to time rendered, or materials furnished, by one company to another, for which charges are made.

In the inter-company charges, the appellee endeavors to charge the affiliated gas companies not less and not more than the cost to it for doing anything that is done for their account (R. 800). Any work that is performed by the appellee for an affiliated company is billed to it (R. 751). The appellee collects from its affiliated companies, and credits against its operating expenses, all of the expenditures made by it which may be attributable to such other companies.

The appellee and its affiliated companies have worked out and applied as fair and accurate a basis as they can for these charges, and have repeatedly stated to the Commission and to the Courts their willingness to adopt any better method or any suggestions for improvement. As stated on page 190, *ante*, the real test is whether, when all of the

operations of all of the system companies are combined in a single cost statement, and the inter-company payments thereby disappear, the *combined* production and distribution costs of the *system* are out of line with those of the appellee or any other company. If the inter-company charges were on such a basis that the appellee, for example, paid to other companies too much or too little, that fact would stand out in the comparison between the *system* costs and the *appellee's* costs, in the table on page 63, *ante*. No such disparity appears.

Payments to the appellee for services to other companies

Appellant's brief endeavors to create the impression that the appellee and its technical staffs perform many services for the affiliated companies, and thus add to the appellee's costs, without any substantial reimbursement therefor. That is not the fact. Nothing is done for an affiliated company for which the appellee is not fully reimbursed, to the full extent of the cost to it of the services rendered or the materials furnished. The record shows the extent and adequacy of such payments (R. 819-821; 761-762; 800).

During the years 1922 and 1923, the appellee made charges to the affiliated gas companies for reimbursement of expenditures incurred by the appellee for the benefit of the affiliated companies, exclusive of the charges for jointly used facilities, which were credited to the appellee's operating expenses, as follows (R. 819-820):

Charges made by appellee to affiliated gas companies for reimbursement of expenditures regularly incurred by appellee for the benefit of affiliated gas companies exclusive of certain charges for jointly used facilities during the year 1922

Engineering and superintendence	$ 72,829.27
Maintenance of department of mains and services	227,943.76
Maintenance of promotion department	116,357.57
Maintenance of department of claims and arrears	45,438.95
Maintenance of chemical department	72,489.09
Maintenance of pressure gauges	5,057.53
Operating 63rd Street gas storage station	58,716.14
Operating Kingsbridge gas storage station	20,658.67
Maintenance of general office restaurant	32,452.99
Maintenance of meter shop school	1,818.73
Pumping drips	3,149.04
Operating general telephone switchboard	29,457.98
Services of chief engineer, advertising manager and steam engineer, and special meter department engineering services	13,874.96
Advertising sign on roof of G. O. building	1,941.04
Society of Gas Engineering of N. Y.	5,825.10
Society of Gas & Electric Accountants	1,107.08
Gas & Electric Choral Society	2,265.34
Gas & Electric Community Club	460.86
Gas Companies' Employees' Mutual Aid Society	42,751.31
Labor and materials furnished by dept. of mains and services	135,879.91
Labor and materials furnished by meter department	12,549.66
Labor and materials furnished by transportation (auto) department	16,136.09
Gas appliances transferred	100,816.04
Total	$1,019,970.11

Charges made by appellee to affiliated gas companies for reimbursement of expenditures regularly incurred by appellee for the benefit of affiliated gas companies exclusive of certain charges for jointly used facilities during the year 1923

Engineering and superintendence	$ 62,201.67
Maintenance of department of mains and services	180,406.13
Maintenance of promotion department	125,923.94
Maintenance of department of claims and arrears	48,204.37
Maintenance of chemical department	69,618.19
Maintenance of pressure gauges	4,396.30
Operating 63rd Street gas storage station	55,078.48
Operating Kingsbridge gas storage station	23,777.91
Maintenance of general office restaurant	28,889.21
Maintenance of meter shop school	1,510.25
Pumping drips	2,998.75
Operating general telephone switchboard	30,008.63
Services of chief engineer, advertising manager and steam engineer, and special meter department engineering services	16,212.77
Advertising sign on roof of G. O. building	87.04
Society of Gas Engineering of N. Y.	6,511.37
Society of Gas & Electric Accountants	1,501.43
Gas & Electric Choral Society	1,557.59
Gas & Electric Community Club	332.97
Gas Companies' Employees' Mutual Aid Society	46,855.59
Labor and materials furnished by dept. of mains and services	107,626.01
Labor and materials furnished by meter department	15,619.46
Labor and materials furnished by transportation (auto) department	11,670.53
Gas appliances transferred	96,103.56
Total	$937,092.15

In addition to the charges which are made regularly, for services continuously rendered, the appellee makes charges for the reimbursement of special expenditures as and when they occur (R. 821). Charges are made from time to time by the affiliated gas companies for services and supplies furnished to the appellee, upon the basis of cost of labor and material plus a percentage for expenditures which cannot be specifically allocated (R. 821).

As to the percentages added for labor and material furnished and service rendered by the appellee to its affiliated companies, Mr. Brundage testified that they represented the overhead cost of doing the work and furnishing the material, which could not be allocated to the specific accounts af-

fected and that such allocation could not be made because the detail clerical work would be prohibitive. The percentages so added to those charges by the appellee are credited to the operating expenses under the account "undistributed adjustments," and the same result is reached as though the cost had been definitely allocated. The amounts charged for such percentages and credited to undistributed adjustments were, for 1922, $26,705.89, and, for 1923, $25,036.12 (R. 821-822). For work done by the street department for affiliated gas companies, a charge is made representing the cost plus five per cent. (R. 761). The charges made by the appellee to the affiliated companies reimburse the appellee for all the costs incurred (R. 761, 762, 800).

No warrant for any further credits to appellee's operating expenses

There is neither basis in the record, nor justification in the facts, for the making by the appellee of any further charges against its affiliated companies than those already made and credited to the appropriate operating accounts, or for pro-rating to non-gas business any operating expenses charged by the appellee to its gas business.

No witness was called in behalf of the defendants to testify that any of the inter-company charges or their apportionments are unreasonable or improper, or that there is any occasion for varying the appellee's actual treatment of these outlays.

POINT SEVENTEEN

VALUE OF MAINS AND SERVICES

Appellant contends (Brief, pages 152, 156 *et seq.*) that the Court below "made an exaggerated estimate of the cost to reproduce appellee's property in the following particulars: (1) The land of appellee; (2) the street mains and services" (page 152).

Out of the great volume and variety of the property used in serving the appellee's consumers, the appellant's brief singles out these two items or groups (land and mains and services) to claim that the appraisals submitted as to them were "an exaggerated estimate." As to the reasonableness and correctness of the reproduction cost of the *rest* of the physical property, the appellant's brief undertakes no challenge.

At page 156 *et seq.*, of his brief, appellant shows that the Master reduced the appellee's estimate of reproduction cost from $37,075,232.97 to $27,450,000 on mains and from $5,557,284.35 to $4,350,000 on services (R. 2314, fol. 3397; R. 315, fol. 3308; R. 186; R. 114-15). This was a drastic and serious reduction, determined upon by the Master for reasons admittedly outside the record (R. 114). In reaching his figure of present value, the Master then cut still deeper into the values proven, and included in the present value of the property $27,000,000 for appellee's mains and $3,000,000 for its services (R. 116, 118). We believe that such a reduction was unwarranted, but it was made, and of necessity appellant's brief is devoted principally to an attack upon Mr. Simpson's appraisal in behalf of the appellee, and *not to any attempt to demonstrate that the figures found by the Master were too high.*

The assertions of the appellant's brief as to Mr. Simpson's appraisal of these mains and services are so characteristically contrary to the record, that we refer briefly to some of these mis-statements, before we analyze the grounds upon which the Master, in an excess of caution, so sharply reduced Mr. Simpson's figures.

1. Appellant's brief says (page 158):

> "Mr. Simpson made no adequate analysis of costs or of the time which would be consumed," etc.

At R. 469, Mr. Simpson testified, on March 19, 1924:

> "We have been engaged in the work of this appraisal (Plaintiff's Exhibits 268-270) since shortly after June 1st, until a few days ago."

This would indicate that Mr. Simpson had devoted at least eight months to the preparation of his appraisal. Mr. Simpson's cross-examination by the Attorney-General, principally on the cost details of this exhibit, covers more than 100 pages of this record (R., 450-553), and a reading of his answers to the Attorney-General's questions shows how thorough and adequate was his analysis of all factors of cost entering into the appraisal.

The Special Master said (R., 114):

> "I have great respect for Mr. Simpson's knowledge and the detail with which he has worked out his estimates."

As to the Attorney-General's allegation that Mr. Simpson made no analysis of the time to be consumed in laying the mains, the fact is that he testified that the work could not be done economically in less than two years (R., 508, 519), and he fully supported this on cross-examination (R. 520, 521, 536).

2. Appellant's brief (p. 158) complains that although the appellee pays only $5.60 per day for men who did caulking work on piece-meal jobs, Mr. Simpson's appraisal used the prevailing or union rate of $8.00 per day for caulkers. As to this, Mr. Simpson gave the following clear explanation (R., 567-68):

> "I will explain why I applied in my appraisal the prevailing rate of wages as of June 1st, 1923, for caulkers, rather than the wages which plaintiff was paying to skilled laborers who were doing caulking among various kinds of work. In the first place the men we employ to do caulking work are not regular caulkers, but if these men were continuously employed at caulking work, which is very laborious, very difficult, we would have to pay the prevailing rate of wages for caulkers. In the next place, the wages that we pay to all classes of labor discount certain elements, which are steady employment—our men are employed steadily and they are not controlled by general industrial conditions; our men are not limited to a particular class of work, we shift them around so that the lack or the abundance of one kind of work does not make them suffer; our men have the benefit of a pension system, they have free medical service, free dental service, they get sick benefits, and they are also in receipt, each one of them, of a free insurance policy in the amount of $750. Now, the nature of our work, the work in my department, requires that we work at times during the whole 24 hours of the day, and our men, therefore, have opportunities of working at other times than their regular working hours in addition to their regular eight hours, and for that they receive time and one-half, and without exhausting any of our men we are able to add considerably to their weekly wage. We are able to secure labor lower than the prevailing rates (interruption). Because of these elements I have given before, and because our labor units are

small, we do not employ a great many men. If we had to do a large amount of work expeditiously we would have to go into the market and pay the prevailing rate of wages which our contractors whom we have hired on work of this sort have had to pay. *If we were doing any large quantity of laying of mains, we would have to employ caulkers and pay caulkers' wages, or else hire a contractor who would hire the caulkers*" (R. 567-568):

3. Appellant's brief asserts (p. 158)

> "Mr. Simpson planned to have the 1,000 miles of main *all caulked* by hand (pp. 495 to 500)."

The testimony was that pneumatic tools would be used except on the smaller sizes (R. 499):

> "I assumed the joints on the sizes 12 inch and larger, *would be done by pneumatic tools* but you could not do it properly on anything smaller than 12 inch. I know it would not be practicable, for I have tried it with pneumatic hammers down to 6 inch sizes."

4. Appellant's brief asserts (p. 158):

> "He figured on using hand work for excavation throughout (pp. 500-501)."

What Mr. Simpson did figure and testify to was that he would use *the more economical method according to the conditions* (R. 500-501):

> "Speaking of the excavation and backfill for all of the mains included in Pltff.'s Ex. No. 268, I assumed that it would all be done by hand labor, except the rock excavation, which would be accomplished, where possible, by pneumatic tools; the excavation of the pavement would be accomplished by pneumatic tools; and that I have figured on. But the

> earth excavation would be made by hand methods, throughout the entire Island of Manhattan, because no other method could be used, on account of the subsurface structures and other things in the way. *It would be a great deal more expensive even if you were permitted to use excavating machines.*"

Mr. Simpson confirmed this by testimony (R. 516) that he had experimented with trenching machines in the Borough of The Bronx, where conditions would be much more favorable for machine work than in Manhattan, but that the results were not favorable.

5. Appellant's brief asserts (p. 159):

> "He expected to *tamp all of the backfill by hand,* although machines have been perfected for this purpose (p. 515)."

Mr. Simpson did not so testify (R. 515-16):

> "The difference between a pneumatic rammer and the Staley tamper is that the Staley automatic tamper is a machine that is on runs, spans the trench and has a big shoe that is alternately raised and lowered, while the other is a pneumatic rammer with a long bottom, with a hose connected to it running from the compressor. The Pauling and Harnischfeger Co. also put out a tamper. In Exhibit No. 268, *I have figured on tamping the dirt back into these trenches, by a process of hand tamping up to the point where the pneumatic machinery could be used.* We used a Staley machine up at the 11th Street yard, but discontinued the use of that six or seven years ago; it was not satisfactory. In making up Plaintiff's Exhibit No. 268, I figured the ideal condition of hauling away the amount of dirt which was displaced by the pipe. The use of the tamping machine does not obviate the necessity for hauling away some of this dirt, as you cannot put the dirt back any tighter than it

was there and we are merely taking out the cubical contents of the pipe itself. The tamping machine is not as economical or good as the pneumatic rammers, for it is a big, bulky, heavy machine and came out at a period when compressors had not been brought up to the stage they are now."

6. Appellant's brief asserts (p. 159):

> "He expected to lay 1½ inch main where it still existed, although such small mains have not been laid in New York for many years."

Mr. Simpson testified (R. 512) that there was 1,198 feet of 1½-inch main inventoried in his appraisal, and he gave from memory some of the special locations and circumstances where this size is used and is especially adapted. He showed that all of this small-size main is used and useful (R. 512). It all was adequately supplying the consumers connected therewith (R. 512).

Is it the appellant's contention that where the appellee has a 1½-inch main which is satisfactorily supplying the consumers connected therewith, it should be retired from use and that a larger main than is needed should be laid in its place, thereby increasing the appellee's operating expenses and both the replacement cost and the original cost of its mains?

7. Appellant's brief (pp. 158-59) makes various assertions as to paralleling of mains (called by him "duplication") in various blocks. There was no proof of any excess of mains or main capacity, in any street or block, or any uneconomical or unwise construction or lay-out.

Mr. Woods testified very clearly as to this at R. 1958, and Mr. Simpson at R. 519. Appellant's counsel should have stated frankly to the Court the undisputed fact that

more than one distribution main is required on wide streets or on streets containing car tracks, and that in addition to distribution mains, there must be "trunk feeder" mains and "transfer" mains, in the same streets with the distribution mains. In sections near a plant or holder station, there will quite naturally be a number of mains of the different kinds in the streets.

8. Appellant's brief *purports* (p. 159) to quote Mr. Simpson's version of "the method in which he got the price for the 180,000 tons of main required." All that is quoted is the bantering part of a single conversation with the representative of one company. Mr. Simpson's actual narrative of the manner in which he obtained his pipe prices may be less *interesting* but it is far more pertinent. At R. 482-83, Mr. Simpson testified as follows, as to his inquiries into the pipe prices:

> "Referring to Plaintiff's Exhibit No. 268, the price as of June 1, 1923, for 6 inch cast iron pipe is $69.60 per ton, delivered in New York. The three inch pipe is $78.60 per ton, delivered in New York. The 4 inch is $71.60; 8 inch is $67.60, and the 12 inch is $67.60. These prices were obtained from The United States, the Warren, and the Fox foundries; they represent in my judgment the market price of that class of pipe as of June 1, 1923. I made inquiries for prices, as of June 1, 1923 from those foundries, in July of 1923, from whomever was in charge of their sales at the time. In the United States Foundry it was Mr. Stokes; as to the Warren foundry, I do not know the man's name; John Fox Company's salesman was Mr. Nicholas Engle, and all these inquiries were made by telephone and were confirmed by letters. *The whole subject matter of these inquiries covered a period of probably two or three weeks, for after getting the information had to check it up with other sources of information to*

obtain what in my judgment, represented the market price."

Mr. Simpson's conversation with Mr. Stokes (R. 521) has an entirely different aspect when read together with the statements which precede it (R. 520), but are omitted by the appellant. These statements were:

> "I had some conversation with Mr. Stokes, the general sales manager of the United States Cast Iron Pipe & Foundry Company, when he stopped to see me in New York, at my office. Nothing about the capacity came up at all, *what I was interested in doing was bawling out the United States Cast Iron Pipe & Foundry Company for the deliveries they had made to date, and that was the principal line of inquiry.*"

Mr. Simpson's cross-examination on the subject of pipe prices was protracted (see, for example, R. 482-93), and these pages refute the Attorney-General's intimation that the pipe prices were obtained solely from Mr. Stokes in the casual manner alleged. Mr. Simpson was familiar with the prices to be obtained by very large tonnage purchases, as he testified that *he had bought as much as 13,000 tons of pipe at one time* (R. 492).

9. Appellant's brief (R. 159-63) undertakes a novel and unsupported argument that the cost of extra work occasioned by sub-surface structures in the streets should not be allowed as a part of present replacement cost. Appellant assumes that this item of the cost of changing subsurface structures, etc., which he believes was erroneously included, would amount to $5,000,000, out of the $27,000,000 allowed by the Special Master for the mains.

In the first place, the appellant's brief greatly exaggerates and overstates the cost of this item. Mr. Simpson tes-

tified (R. 487) that the item of extra work in his appraisal (Exhibit No. 268) covered the following items of cost.

> "The item of extra work covers the cost of changing the location of sub-surface structures, repairing damages to same incident to the work, making provision for temporary gutters, pumping water from the trench and repaving cuts damaged by summer storms, and also delays to labor on account of the same; repairing sidewalks, coal chutes and vaults, etc., damaged as an incident to the work; repairing damages caused by blasting, by flying chips from asphalt cutting, from pipe cutting, etc.; handling material into buildings where our work blocks the access to same; moving the sheeting to allow for laying of pipe; handling tidewater in the cuts; testing the pipe, purging the pipe, filling up depressions in the street due to the settlement after the main has been backfilled, and the replacement of cracked and defective pipes and specials. Those are the most common elements entering into the item of extra work."

If the *whole item* of extra work of all kinds as above defined, were taken and allowed in the amounts shown by Mr. Simpson, the total for the whole quantity of main would be $2,021,044.27 (R. 699, 700). The Special Master reduced Mr. Simpson's appraisal from $37,075,232.97 to $27,000,000. Applying this same ratio of decrease to the cost of *all* the extra work, this item of extra work would amount to approximately $1,500,000 out of the $27,000,000 found by the Master. But, as above shown, the item of extra work includes *a great many other things than changing subsurface structures.* So much less than $1,500,000 is involved in this contention.

In the second place, the appellant should know that there long have been sub-surface structures in New York

City streets, and that there were some sub-surface structures encountered even when the first of the existing mains was laid. Back as far as Civil War days there would have been water mains, sewers, car tracks, catch basins, etc.

As to the validity of the grounds on which the Attorney-General urges the exclusion of the cost of dealing with sub-surface structures, it should be noted that Mr. Sompson's assumptions, *in his appraisal,* were not as stated in the appellant's brief. At R. 473, which is cited by the Attorney-General, Mr. Simpson stated, after describing sub-surface conditions:

> "Now, of course, IN THIS APPRAISAL I have NOT *figured that, for the reason that the main is there, but you are asking about* PRESENT-TIME CONSTRUCTION, *and that would be the case.*"

The weight given by him to the difficulties occasioned by sub-surface structures would appear to have been not nearly as great as the Master and Attorney-General seem to indicate, for the reason that he was utilizing for the laying of his main a channel which already existed and was not making a brand new location for the main. The Master had inquired at great length as to what conditions would be encountered in laying *a new main where no channel existed.*

The argument of the Attorney-General on this point seems to have novelty rather than pertinency.

Urgent grounds for increase rather than reduction in Special Master's figures as to mains and services

This brings us to the reasons assigned by the Special Master for cutting so drastically Mr. Simpson's figures, for reasons wholly outside the record (R. 114-15; Brief,

pages 156-158). The Master eliminated $9,625,233 on mains and $800,284 on services—a total of $10,425,517.

With the utmost earnestness, we urge that any reconsideration of the *minimum* amounts found by the Special Master for the reproduction cost and present value of the mains and services used in the appellee's gas business, *should lead to increase rather than reduction in them.* The drastic and extreme reductions which the Special Master made in Mr. Simpson's figures seem to us to be without warrant in the evidence and to be based on several misapprehensions as to pertinent facts.

At R. 114, the Special Master's opinion states that Mr. Simpson appraised the reproduction value of the mains at the sum of $37,075,233 and of the services at the sum of $5,557,284, whereas the mains had cost the company $13,531,095.10 and the services no more than $1,971,101.26. From this the Special Master made the observation that the reproduction-cost figure of June 1st, 1923, as estimated by Mr. Simpson, would be nearly three times greater than the actual investment cost of the mains and about two and one-half times greater than the actual investment cost of the services.

The Special Master continued by saying that so great an increase in the costs of mains and services "does not accord with my opinion" (R. 114) as to the general increases of cost of labor and material:

> "While the generally accepted increase over *pre-war prices* of labor and materials is some 60 per cent., it is true that in the case of mains, particularly the great increase of underground structures in the Borough of Manhattan in the last fifteen or twenty years, has added considerably to the cost of installation. It seems to me, however, that if we accord sub-

> stantially 100 per cent increase over the original cost, these difficulties, as well as the increased cost of labor and materials, are taken into consideration."

At this point, it is apparent that the Special Master changed his basis of comparison from *actual investment cost* to merely *pre-war cost* without, however, changing the investment dollars into pre-war dollars. With respect to the mains of the appellee, the terms "investment cost" and "pre-war cost" are not nearly synonymous, as the records in evidence show, and herein is the fundamental misapprehension which evidently led to the drastic deductions.

In replying to the argument of the Attorney-General and the ruling of the Master on this point, frankly based on assertions of personal opinion and facts outside of the testimony or exhibits, we beg leave to refer, likewise, to facts which have appeared in the exhibits in this and the prior suits of the appellee in this Court, but are not *printed* in the present record, *except* in the instances noted. The facts are susceptible of ready check by the appellant, to documents to which his representatives long had access.

On November 11, 1884, the Consolidated Gas Company, which then came into being, purchased, roughly, 3,700,000 feet of mains on the basis of an appraisal made by Mr. Rowland and at the prices for labor and material prevailing at that time. The appellee's records indicate that the two major items of main construction upon which practically all main costs are based (viz., common labor and cast iron pipe) had the following values at that time (1884):

Common labor.....16 cents per hour
Cast iron pipe.....$25.50 per ton

From November 11, 1884, mains were laid from year to

year, oftentimes at prices very similar to these 1884 costs and in some instances at prices lower than these 1884 costs, down to about 1914, when prices began to rise rapidly until they reached the present level.

If the Special Master's impression that the increase in present costs over "pre-war" figures amounts to not more than 60 per cent., is true with respect to some commodities, it has not been anywhere near true in connection with main and service operations. If we are to consider the "pre-war" period as 1913-1914, we find that at this period, common labor was 25 cents an hour, as compared with 60 cents in 1923 (R. 495), and that cast-iron pipe was $20.30 per ton in 1913-1914, as compared with $69.60 per ton in 1923 (R. 482).

This shows very much more than a 60 per cent. increase on the two major and practically controlling elements of main construction. In fact, it shows an increase over *pre-war* costs of more than three times on cast-iron pipe and nearly three times on labor, aside from the diminished efficiency of labor.

For the purpose of making a comparison between the investment cost and the reproduction cost as of June 1st, 1923, the amount of main laid or acquired by the appellee during each successive year from 1884 until 1923 was tabulated, and then multiplied, in one instance by the cost of cast-iron pipe current during that year and in the second instance by the cost of common labor current during that year, and *a weighted average cost obtained of cast-iron pipe and common labor for the period of the investment in the mains from 1884 to 1923.* This weighted average amounted to, for cast-iron pipe, $23.80 per ton and for common labor, 18.4 cents per hour. The 1923 cost of cast-iron pipe was $69.60 per ton (R. 482) or *2.92* times the

weighted average investment figure for pipe, and the 1923 cost of common labor was 66 cents per hour (R. 495) or *3.26* times the weighted average investment figure for common labor. This fully confirms the ratio between Mr. Simpson's "reproduction value" figures and the original investment, which ratio the Special Master rejected for reasons outside the record.

As stated before, these two items (the cost of pipe and the cost of common labor) are the outstanding and controlling elements in the cost of main laying. On a main system such as that of the appellee, labor and materials bear the respective proportions of nine to eight, and the combined average of 1923 costs was more than three times the average investment figures. It seems therefore that the Special Master was clearly called upon to accept Mr. Simpson's appraisal figure, which was actually only 2.8 times the investment total. The Special Master evidently failed to realize and take into account the fact that approximately 40 per cent. of the appellee's *present* mains were acquired as far back as 1884 and that a very substantial quantity were laid in a period of very low prices (1884-1910).

The above is merely a comparison which has not as yet taken into account the following further factors, at least some of which the Special Master indicates in his report should be given considerable weight:

(a) The change in underground and above-ground conditions, as between the time historically when the mains were laid and at the reproduction period, viz., June 1st, 1923.

(b) Improvements which have been made to the system, such as the substitution of lead wool for cast lead

joints (R. 546). These improvements do not appear in the cost as shown by the books, for the reason that they have been made in conjunction with maintenance and have been charged in nearly all cases to maintenance accounts.

(c) At the time when the bulk of these mains were laid, the restrictions, on the part of the City of New York, as to the manner and extent of progress on work of this sort, were almost negligible, but they are a substantial factor today. In many of the downtown streets, work is only permitted at night, and all of the earth must be hauled away immediately and the excavation decked over, which is a very costly method of construction.

Appellant's Exhibit No. 91 (R. 3024, side folio pages 4473-4494) showed the cost of laying all of the mains of the Consolidated Company in Manhattan for the year 1923 and also the cost for laying all of the mains of all the companies in Manhattan for the year 1923. These actual costs were much higher than those which Mr. Simpson adopted for his average unit figure, and were introduced by the appellee to show how conservative were the figures on which the reproduction-cost appraisal was based.

Mr. Simpson testified (R. 1337) *that the actual cost of the mains which he installed in the appellee's territory during the year 1923 averaged 50.13 per cent. higher than the corresponding figures used in his appraisal of such mains as of June 1, 1923.*

Still further showing Mr. Simpson's extreme conservatism in making his appraisal is his testimony (R. 562) in which he indicates the wages paid by representative contractors in the City of New York at the time of his appraisal as compared with the lowest figure which he had assumed.

"I secure from time to time information as to the rates of wages paid by others in industries employing the same class of labor as I employ. I know what contractors in the City of New York were paying for common labor of the class that would be employed in reproducing the mains and services which I have inventoried and appraised as of June 1st, 1923. In the territory of the Borough of Manhattan and the Bronx the contractors were paying for common labor, as of June 1st, 1923, as follows: Thomas Crimmins Contracting Company were paying $6.00 a day; building contractors were paying $7.00 and $8.00 a day for common labor in the Borough of Manhattan; the Hickey Contracting Company were paying $5.62 a day, that was for a nine-hour day in that case; the subway contractors were paying $6.00 a day. I applied for common labor in my appraisal, $4.80 a day."

Another instance which shows the conservatism of Mr. Simpson's figures is quoted at R. 518:

"During 1922 we had a contractor remove all surplus dirt on the 20 inch main in the Bronx and it cost us $2.44 per yard, *as against $1.60 that I have given.*"

The same conditions above described as to the relationship between the investment cost and the present replacement cost of appellee's *mains,* apply also to the appellee's *services,* but in a lessor degree, owing to the fact that the proportion of services acquired in 1884 which are in existence and in use to-day, is somewhat smaller, due to the constant changing of the occupancy of buildings, and to the development both of larger building units and increased uses for gas, both of which require the replacement of services.

POINT EIGHTEEN

VALUE OF LAND

Appellant asks (Brief, pages 152-56) that this Court review the values placed by the Master and District Court upon the many parcels of land used by the appellee in its gas business, and determine that "exaggerated" values were fixed. The Special Master's discussion of this subject is at R. 94-96, and it seems clear that this Court could not practicably review the valuations placed upon all of this real estate.

Appellant makes no effort to attack the integrity, competence or conservatism of the appellee's witnesses, and does not claim superior, or even equal, qualifications for the two witnesses who testified in behalf of the City of New York. Appellant tries to lift Messrs. McHale and Boylan into the same class with Messrs. Francis K. Stevens and Robert Huntley, two of the foremost real estate men of the world, by a "concession" that "*all* were competent real estate experts."

It is difficult to see how the appellant makes an issue which this Court could review, if ever this Court should or would try to review land valuations upon disputed evidence. The experienced Special Master heard the witnesses, saw the properties, and had all of the land exhibits and land data before him. In view of the superlative qualifications of both of the appellee's witnesses, and in view of the fact that, as is shown by an examination of the appraisal tables (reprinted on pages 108 to 112, hereof, *ante*), the Master took generally the *lower* figure submitted by either Mr. Huntley or Mr. Stevens (except in the numerous instances where he adopted still lower figures derived

by him from all of the testimony), we think it clear that the appellant has presented no question for review as to land values, especially as he has discussed only the qualifications of the appraisal witnesses and has not attempted to discuss any of the evidence as to any of the parcels.

The index to the "valuations" of the City's experts will be found in the close correspondence of their figures with the assessed valuations (see tables on pages 108 to 112, *ante*). Of the 38 parcels owned by the appellee, the City's expert valued 18 parcels at less than the City's assessed valuation, and his appraisal for the 38 parcels was only about one-fourth of one per cent. in excess of the assessed valuation (R. 1762). The appellant (page 152) describes his witness McHale, as "one of the appraisers called in the case brought by this company (the appellee) in 1906." This should not be construed as meaning that Mr. McHale testified in behalf of the appellee, for he has been a perennial witness to minimum values for the property of utilities. In that occupation, he is truly "the dean of them all" (page 152).

With no attack made on the qualifications or fairness of the appellee's experts and no effort made to show that the testimony as to any parcel indicates too high a valuation, this Court could hardly undertake to change the Master's findings as to the values of any parcels.

The qualifications of the respective witnesses will be found in connection with their testimony, in the record.

POINT NINETEEN

WORKING CAPITAL

The appellant contends that the allowance for working capital was "excessive and unreasonable" (Statement of Points, R. 3074), and "should not have exceeded $4,000,000 and should undoubtedly be much less" (Brief, page 77). Before the Special Master, the defendant Attorney-General contended that the allowance for working capital should be $4,811,538.80 (R. 100).

The Special Master found that at least $3,500,000 of working capital was reasonably required in the gas business of the appellee and at least $3,000,000 in the business of The Astoria Company (Findings Nos. 74, 77; R. 187, 189; Opinion, R. 98-101), and that $5,900,000 of this $6,500,000 was used in the service of the gas consumers of the appellee (R. 100) and so should be included in the present "rate base."

The gas sales of the appellee increased 33.43 per cent., from 1918 through 1923. As of December 31, 1918, the findings in the prior suit (Ex. No. 885A) allowed $3,800,000 for the working capital of the appellee's own gas activities and $1,926,709 for the Astoria working capital devoted to the service of the appellee, making $5,726,709 in all, as compared with the $5,900,000 allowed as of 1923, despite the 33.43 per cent. increase meanwhile in sales. Had the present Master determined his allowance on the basis adopted in the former suit, which gave effect to the volume of sales, the 1923 allowance would have been $7,641,000 instead of the $5,900,000 allowed. Far from making any such *increase*, the $3,800,000 allowed for the appellee's own working capital as of December 31, 1918, was reduced by the Master to $3,500,000 for 1924, despite the increase meanwhile in sales, wages, and prices of materials.

The Master disregarded the uncontradicted evidence and reached a minimum which would be ruinous, if ever enforced as a practical limitation. On a conservative basis, the appellee proved that its actual requirements for working capital for its gas business were and are at least $6,900,000, and that at least $3,400,000 more of working capital was reasonably required and actually used by The Astoria Company, making at least $10,300,000 in all (R. 100). Of the $3,400,000 of working capital required and used by The Astoria Company, at least $2,722,530.24 (or slightly more than 80 per cent.; Exs. Nos. 866a; 868; 890; R. 2541, 2645, 2800, folio 4109) was shown to be used in the service of the appellee's consumers.

Even on *a combination of the lowest figures, testified by any witnesses,* for the working capital required by the appellee and The Astoria Company—a process of computation which the evidence does not in any way sustain as reasonable—the lowest justifiable figure which could be sustained for the working capital required for the appellee is $6,900,000 (Ex. No. 856; R. 2443), and for the working capital required for The Astoria Company, the lowest figure would have been $3,280,000 (Ex. No. 830; R. 2379), or a minimum of $10,180,000 for the two companies, of which at least $9,526,440.94 is devoted to the service of the appellee's consumers and would represent the minimum basis of allowance herein.

Nevertheless, the Special Master reduced both the *actual* and the *minimum* amount of working capital to the *crippling and inadequate sum of $6,500,000,* of which $3,500,000 was for the appellee and $3,000,000 was for The Astoria Company; and of this total, he allocated only $5,900,000 to the requirements of the service of the appellee's own consumers (Opinion, R. 101; Findings Nos. 74, 77; R. 187, 189).

The gas business of the appellee could not long be carried on with the sum allowed by the Special Master, and there is nothing in the evidence which could sustain the demand of the appellant for a still lower figure.

Uncontradicted evidence disregarded

The Special Master (Opinion; R. 100) referred to the "*claim*" of the Attorney-General that no more than twenty cents per thousand cubic feet should be allowed for the working capital of the appellee, which would make $4,811,538.80. Yet no one testified to or in any way supported under oath any such figure, in the aggregate or in relation to the gas sold, and the Special Master allowed the appellee only $3,500,000, not $4,811,538.80 (Opinion; R. 100, 101). The Special Master likewise referred (R. 100) to the Attorney-General's "claim" that this figure should cover also the requirements of The Astoria Company, but no one testified to any such thing or indicated under oath any way in which any such thing could be done. The defendants offered no testimony on the subject, and the lowest amounts shown by the testimony of any witnesses were $6,900,000 for the appellee and $3,280,000 for The Astoria Company, of which latter sum $2,626,440.94 is devoted to the use of the appellee's consumers, or an aggregate amount required by the appellee in the service of its consumers of at least $9,526,440.94.

Ohio Utilities Co. v. *Ohio Public Utilities Comn., supra;*

The Westinghouse Electric and Manufacturing Co. v. *The Denver Tramway Co., supra;*

New York and Richmond Gas Co. v. *Prendergast*, 10 Fed. (2nd) 167 (Spec. Stat. Ct.; E. D. of N. Y.).

In the *Ohio Utilities Company* case, the Ohio Commission, with the approval of the highest Court of Ohio, had decreased the allowance for working capital *about one-third*, from the sum shown by the uncontradicted evidence. This Court condemned this reduction as "capricious" and restored the full amount.

In the *New York and Richmond Gas Company* case, the proofs as to working capital had corresponded to those in the instant case, and had been presented partly through the testimony of the same witness (Col. Miller), who had estimated the required working capital of that company at $344,146. No one had testified to the sufficiency of a lower sum, but the Special Master allowed the company only $275,000, or about 5.8 per cent. of the total present value of the property. The Special Statutory Court held that the Master should have followed the uncontradicted evidence and could not properly fix a lower sum. So the allowance was increased to $344,146, or about 6.5 per cent. of the total value found for the property by that final decree.

Nature of working capital

A public utility is constitutionally entitled to have included in its "rate base" an adequate allowance for working capital—"an amount such as reasonable business men of experience would require in the conduct of this kind of a business."

> *The Bronx Gas and Electric Co.* v. *Public Service Commission*, P. U. R. 1923A, 255; 28 N. Y. St. Dept. Repts., 329, 364; affd. 208 App. Div. 780, 806;
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> *New York and Queens Gas Co.* v. *Prendergast*, 1 Fed. (2nd), 351; appeal dismissed 268 U. S. 708;

New York and Queens Gas Co. v. *Newton,* 269 Fed. 277, 284; affd. 258 U. S. 178;
Brooklyn Union Gas Co. v. *Nixon,* 2 Fed. (2nd), 118;
New York and Richmond Gas Co. v. *Prendergast, supra;*
Kings County Lighting Co. v. *Prendergast,* 7 Fed. (2nd), 192, 198, 217;
Ohio Utilities Co. v. *Ohio Utilities Comn., supra;*
Brooklyn Borough Gas Company v. *Prendergast* (U. S. District Ct.; E. D. of N. Y.; decided October 2, 1926; not yet reported).

If a gas company had all of its land, plant, machinery, mains, and other "fixed capital" assembled and complete, they would not represent *all* of the property which the company would have to have and use, in order to begin and carry on its service to the public. The cost of this fixed, physical property would not represent all of the outlay needed, to equip the company to begin and continue operation. Certain items of mobile or working capital would have to be secured and used—coal, oil, other materials and supplies, revolving funds of cash, etc.—and monies would have to be invested and "tied up" in accounts receivable, gas supplied but not yet billed, etc.

If a public utility is to live, grow, and serve its patrons efficiently and economically, *it must possess and use an adequate amount of this "mobile" or "floating" capital, in addition to its fixed capital.* Generally the allowance for working capital required in the gas business runs from four to eight per cent. of the present value of the total property, which would produce an allowance in line with the amounts shown to have been actually used and needed in the appellee's gas business.

This *additional and indispensable* element of property devoted to the public service is commonly called *working capital.* It is *the very life-blood* of the enterprise. It is a *revolving fund* of monies, materials, and resources, ever being *used*, ever having to be replenished. The carrying on of operations, the furnishing of good service, the maintenance, renewal, enlargement, and improvement of the physical property, all depend upon the constant availability of an adequate supply of working capital at all times.

Not only does a public utility have to possess and use an adequate amount of working capital, furnished by its investors, but the utility must be allowed to earn a reasonable return upon such adequate amount of working capital, as a part of the "rate base." The regulatory authorities of the State allow a utility to issue stocks and bonds to provide necessary working capital, and of course recognize that the utility must be allowed to earn a fair return upon its working capital.

The necessity that an adequate amount be allowed for working capital

There is no difference in the sound rule which should govern the determination of the amount of working capital, from that applied in the determination of the fair and reasonable value of the fixed property. Cash, accounts receivable, material and supplies, and other mobile assets and actual outlays making up the necessary working capital, represent actual property having a definite value, just as land, buildings, apparatus, and other items making up fixed capital represent property having a definite value, and both are subject to substantially the same conditions in ascertaining the present worth of the property.

The inclusion in the "rate base" of the full amount of the working capital actually and reasonably employed in the business of a utility is as vital to the successful service of its consumers, as is the inclusion of the present worth of the plant and distributing system necessarily used. The amounts of both classes of property necessary for the adequate service of the consumers must be determined by the experience and fairly exercised judgment of the qualified executives and engineers of the company.

If the utility is not allowed to earn a return upon the full amount of working capital actually used and needed, investors will refuse to furnish the full amount of working capital needed for good service, and the consumers suffer, along with the enterprise itself. In a very real sense, it is as important and necessary that the utility should be allowed a full and sufficient amount for working capital as a part of its "rate base," as that the "rate base" should include all of the fixed capital used and needed.

Elements of working capital

The elements which enter into a proper calculation of the required working capital of a gas utility are discussed in detail in the decisions above cited, and comprise the necessary cash on hand to carry on the business, the accounts receivable, the materials on hand, the prepaid expenses such as prepaid insurance and taxes, the amount of gas delivered but not billed, and the amount of gas in the holders and mains. All of these elements represent property devoted to the service of the public. They represent property in which monies have already been invested by the company, to serve its patrons (R. 1368).

The amount of cash necessary to have on hand for op-

eration is not to be determined by any fixed percentage of the dollar volume of the annual business but must be determined as a matter of experience by the sound business judgment of the operating officials (R. 1374).

In like manner, the amount of materials and supplies to be kept on hand must be determined by the judgment and experience of the operating officials (R. 1375).

Gas delivered and not billed and the amount of gas in the holders and mains is property used in carrying on the business and devoted to the service of the public. It is properly included in working capital because there has been an outlay by the company to bring it into being, and there is an amount of it constantly existent and used in the service of the public (R. 1368).

Each consumer is billed monthly for the gas he has received during the previous thirty days (R. 1374). On the average the appellee carries the investment in such gas for a period of one-half of a month prior to indexing the consumer's meter. From four to six days are required after the date of indexing to the issuance of the consumer's bill. Thereafter (from the date of rendering bill to the consumer) the average period for which such charges for gas remain unpaid is about three weeks. So each consumer has in his possession, on the average, for a period of at least six weeks, a portion of the capital or property of the company devoted to the service of the public in supplying gas (R. 1374-1375, 1047-1048).

No deduction for accounts payable

The appellant argues chiefly (Brief, page 83) that deduction should be made from the amount of materials and supplies, etc., actually owned and used, for the accounts

payable due to dealers for supplies, etc. He has even gone so far as to include bond interest and other anticipated or "accrued" liabilities not yet matured, in the items, which he urges should be applied to reduce the value of the appellee's cash, accounts receivable, and material and supplies (Brief, page 83).

Appellant's contention was passed upon adversely in various of the above cases, and the Master and District Court have followed those rulings here.

See cases cited on pages 237 and 238, *ante*.

A utility is entitled to earn a return upon the present value of all of the property which it owns and uses in the public service, even though it may have outstanding debts or obligations, some of which may have been incurred in acquiring the inventoried property. The amounts of outstanding bonds, long or short term notes, or unpaid bills of contractors, are not deducted in determining the appraised value of the plant and property.

The same rule is applicable to working capital as to the plant and property. The test is whether the property is possessed, used, and useful, not whether it has yet been paid for in full or even whether it is to be paid for at all. The value of the assets is not determined or affected by the existence or extent of debts.

The sound accounting rule on this subject was very clearly stated by Mr. Arthur W. Teele, a well-known accountant, at page 14261 of the record in *Consolidated Gas Company* v. *Newton*, as follows:

> "If the question is the determination of working capital employed, then neither accounts payable, nor any other liability should be deducted from the assets. I can conceive of no situation where they

> would be deducted unless in setting down the amount of cash required to be used as working capital there was included in that cash an amount sufficient to discharge the liabilities. In that case, the current liabilities might be deducted, but if the working capital employed in any business venture is being considered, and not the working capital to be contributed, then the liabilities have no part in the determination whatsoever."

The appellant's contention is that a public utility is entitled to earn a return upon only the *capital contributed* by its investors; this Court has held that the return should be figured upon the *capital employed.*

> "Constitutional protection against confiscation does not depend on the *source* of the money used to purchase the property. *It is enough that it is used to render the service.*"
>
> *Board of Public Utility Comrs. of New Jersey* v. *New York Telephone Co.*, U. S. , .

Capital entitled to a return is capital engaged in the service of the public, whether paid for or not, and whatever the arrangements of credits. Whether a company has a large amount of credit, and a small amount of cash, or a large amount of cash and a small amount of credit, the working capital used and necessary does not vary, for both cash and credit are part of working capital. If all current bills were discounted, a company would have more working capital in the form of materials, and less in cash, but the investment in working capital would be the same. The credit available in the bank where money was borrowed would be reduced; and the credit available with dealers increased. The cash in bank would be reduced but the cash capital represented by material and supplies increased. What the amount of each should be, and the proportion of

the total working capital each should be, can be determined properly, only by the operating officials having complete knowledge of the business, and charged with the responsibility of giving adequate service to the public.

The uncontradicted testimony of Mr. James E. Allison, the widely experienced consulting engineer and investment adviser, who was exhaustively examined, in this case, on the subject of working capital, sustained fully the principles above set forth (R. 1368-1369, 1374-1377).

Working capital required by the Consolidated and Astoria companies

The Consolidated Gas Company requires and uses in the services of its consumers approximately 80 per cent. of the property of The Astoria Company. The percentage of the total property of The Astoria Company, including both its physical property and working capital, required and used by the appellee, is thoroughly covered in the reports of Mr. George E. Woods (Pltf.'s Exhibits Nos. 765-766; R. 1112). The amount of working capital of The Astoria Company attributable to the manufacture of gas supplied to the appellee's consumers can only be determined therefore by establishing first the amount of its total requirements and then computing the portion thereof necessarily required and used by the appellee.

In this case, it was therefore necessary for the Court to find and state *separately* the *full* amount of working capital required by the gas operations of each the appellee and The Astoria Company, and to find and state such amounts *as of June 1, 1923, and as of the time of the hearings in this case.* Such increase as takes place in the volume of sales will of course add to the amount of working capital required at the end of 1923 and during 1924.

Amounts shown to be needed

The appellee presented principally the testimony of two witnesses, Messrs. Henry M. Brundage and Alten S. Miller, as to the amount of working capital reasonably required by the appellee and by The Astoria Company.

Mr. H. M. Brundage, then secretary (now a vice-president) of the appellee, and also secretary of The Astoria Company, who, in connection with his duties and responsibilities over a period of twenty-five years, has made a practical study of the requirements of working capital of the appellee and The Astoria Company (R. 1047), testified as to the average amount of working capital actually employed in the gas business of each company during the years 1922 and 1923, from which he eliminated all disputable or doubtful items, and his exhibits (Exhibits Nos. 826, 827 and 830; R. 2351, 2379-2381) show the minimum actual investment of each company in the elements of working capital with the exception of the item of cash, for which he substituted the amount reasonably required in his judgment, in place of the actual cash balance as shown by the company's books.

Mr. Brundage showed that the appellee actually used and reasonably needed in its gas business during the year 1923, and requires, as of the present time, working capital amounting to at least $7,200,000, and that The Astoria Company likewise actually used and required for working capital, during the years 1923 and 1924, at least $3,280,000.

Colonel A. S. Miller, one of the foremost engineers in the United States and a man of broad experience in the construction, operation and management of gas properties, testified that the appellee reasonably required in its gas business as of June 1, 1923, for working capital, under the

average conditions of operation, at least the sum of $6,900,000, and that The Astoria Company likewise reasonably required for the conduct of its gas operations, at least $3,400,000 for working capital.

No testimony was offered by the defendants as to working capital, and the proofs of the appellee in this case are uncontradicted, either as to the actual working capital as proved by Mr. Brundage, or as to the amount of working capital reasonably required in the judgment and experience of an independent, qualified executive or engineer.

The detailed testimony as to the amount of working capital required

If the Court desires to go further into the undisputed facts, we may say that Mr. Brundage laid the foundation for placing in evidence schedules showing the average working capital necessary in the appellee's gas business, exclusive of accounts receivable from affiliated gas and electric companies, for the years ended December 31, 1923, and December 31, 1922 (R. 1047; Pltf's. Exs. Nos. 826 and 827; R. 2351-2352). He testified that these statements showed the amounts which in his judgment were reasonably required for the purposes of working capital of the appellee in its gas business for each of the years mentioned; that they excluded, as the title indicated, the accounts receivable and amounts due from affiliated gas companies, thus eliminating any duplication of working capital when combining with the appellee's property, the portion of the property of The Astoria Company devoted to the appellee's use, and did show in accounts receivable only the amounts due from consumers and sundry debtors limited strictly to the gas business (R. 1047); and that likewise were the items of materials and supplies so limited.

Mr. Brundage further testified that the necessary average actual cash stated was his judgment of the absolute minimum amount of cash which the company should have on hand, on the average, for strictly gas purposes; that any lesser amount would be a cause for genuine business concern, and for alarm, if not promptly remedied (R. 1047); that the average amount invested in gas delivered but not billed was equal to about two-thirds of an average month's operating expenses; that this period consists of one-half of a month's volume resulting from the continuous indexing of meters throughout the month (the 14th of the month being the average index date) plus four to six days taken for billing, so that twenty days' volume represents a fair average of the amount of gas produced and distributed but not billed and, therefore, not yet set up as an account receivable (R. 1047-1048); and that all the figures in these exhibits were actual amounts taken from the books of account in evidence, except the amount of cash, which was averaged in a figure representing his best judgment and experience.

Mr. Brundage's testimony as to working capital

The detailed figures of the average working capital of the appellee, for the year ended December 31, 1923, were submitted by Mr. Brundage in Exhibit No. 826 (R. 2351), which showed that the average amount of accounts receivable of the appellee in its gas business, exclusive of all amounts due from affiliated gas companies, whether such items excluded pertained to the gas business or not, was $2,187,409.74; that the actual average investment in materials and supplies necessary in the appellee's gas business, was $1,650,763.25; that the average investment during the year in gas delivered but not yet billed, was $1,385,084.79;

and that his judgment of the average cash necessary for the conduct of the appellee's gas business was $2,000,000 (which figure was less than the actual average cash on hand for all corporate purposes); or a total of $7,223,357.78 as the working capital used and necessary in the gas business of the appellee.

Mr. Brundage reached his figures for the average necessary cash from the standpoint of the operating expenses, the average balances due sundry creditors, the necessity of maintaining credit, and the necessity of discounting bills, etc. The actual cash used was in excess of the amounts estimated (R. 1059-1060).

Mr. Brundage also placed in evidence an exhibit stating the working capital of The Astoria Company for 1922 and 1923 (R. 1052-1053; Ex. No. 830; R. 2379-2381), which showed, by the first two sheets, the average actual working capital of the company in those years, the amounts of cash, accounts receivable, and materials and supplies, being those shown by the books of account in evidence. On the third and fourth sheets of Exhibit No. 830 were shown The Astoria Company's actual accounts receivable, with the amounts due from affiliated gas companies eliminated; the actual amount of materials and supplies on hand; and the average cash necessary in Mr. Brundage's judgment, stated to be $500,000 as a minimum (R. 1052).

The accounts receivable of The Astoria Company, exclusive of accounts receivable from affiliated gas companies, consist of charges against debtors for coke, cyanogen, sludge, coal tar, water-gas tar, ammonium sulphate and other residuals (R. 1053).

Exhibit No. 830 (R. 2379-2381) showed for the year ended December 31, 1923, an average investment in mate-

rials and supplies of $2,660,551.90, in accounts receivable, other than from affiliated companies, of $120,798.36, and cash reasonably required, of $500,000, or a total working capital used and necessary in the gas business of The Astoria Company, exclusive of accounts receivable from affiliated companies, amounting to $3,281,350.26.

Colonel Miller's estimate of working capital

Colonel A. S. Miller, whose testimony on this subject has been accepted and followed by the State and Federal Courts in many of the cases above cited, based his estimate of the reasonable amount of the appellee's working capital upon a unit of investment per thousand cubic feet of annual sales of gas, which from his experience he found to be reasonably necessary for a company operating under the conditions such as those of the appellee. To the extent that gas was made and sold by the appellee, he used a unit of forty cents per thousand cubic feet of annual sales, and for the portion of the gas sold by the appellee which was purchased from other companies, a unit of twenty cents per thousand cubic feet of annual sales (Ex. No. 863; R. 2501).

For The Astoria Company (covering only the manufacture of gas), Colonel Miller used the unit of twenty cents per thousand cubic feet of annual sales (R. 1573).

Comparison of the Brundage and Miller computations

Appellant's brief tries to create an impression of inconsistency and variance between the appellee's principal witnesses. Comparison of the amounts of working capital testified to by these two experienced business men shows that even the difference in the angle of approach of the

subject has produced only a very slightly different result in the distribution between the two companies of the combined working capital of the appellee and The Astoria Company. The figures are set forth in the following table:

	Testimony of Mr. Brundage	*Testimony of Col. Miller*
Consolidated	$ 7,200,000	$ 6,900,000
Astoria	3,280,000	3,400,000
Total	$10,480,000	$10,300,000

Mr. Brundage showed in Exhibit No. 826 (R. 2351) the actual working capital of the appellee, as shown by its books, and showed in Exhibit No. 830 (R. 2379-2381) the *additional* amount of working capital required by The Astoria Company as a manufacturing department. His figure included nothing for accounts receivable of The Astoria Company other than the average outstanding balances for the sale of residuals. He has included nothing for gas delivered but not billed by The Astoria Company, in order to avoid any duplication of the appellee's gas delivered but not billed, when the operations of the two companies are combined. His figure, therefore, as to The Astoria Company is incomplete, if taken separately and apart from the operations of the appellee, but in the combined operations of the two companies, his calculation truly states the amount of working capital actually and reasonably employed, by both.

Colonel Miller, on the other hand, presented the figures of the normal requirements of each company upon the basis of each being totally independent of the other. In the case of the appellee, he took into account the lesser amount of working capital normally required by a company as to the portion of its gas purchased, rather than as to the portion

manufactured in its own plants, and he likewise took into account as to The Astoria Company a reasonable amount for gas delivered but not billed and for accounts receivable, for which Mr. Brundage included nothing. Here again, when the operations of the two companies are combined, no duplication results in his total figure of $10,300,000.

It is evident, therefore, that the slight differences, as to the companies individually, between the amounts of working capital actually employed and the reasonable amount in the judgment of Colonel Miller, are due to differences in method of compatation. It is strong and convincing confirmation of Mr. Brundage's testimony and judgment based on his actual experience, that an independent engineer, approaching the question from a widely different angle, has reached a judgment figure for the two companies substantially in accord with Mr. Brundage's experience as to the actual requirements of each.

Because he was unable to offer any *present-day* proof to challenge the amounts shown to be actually used and needed as of 1923 and 1924, the appellant seems to rely largely upon the proofs submitted to Judge Hough in 1907, as to the amount of working capital required by the present appellee in 1905 and 1906, when the costs of materials, the rates of pay of labor, and similar elements, were very much lower than in 1923 and 1924. The present case is necessarily controlled by the present record, not by a *resumé* of testimony submitted in another case, and under other conditions, twenty years ago.

Appellant's brief also quotes from Judge Hand's opinion in 1920, in which he cut the appellee's allowance for working capital to a *minimum* figure, because it was sufficient for all the purposes of his assumptions, "not because

I mean to fix any such sum." Judge Hand was dealing with the working capital of the appellee alone, and the Attorney-General's own engineer (Mr. Little) had testified to a basis which meant $3,800,000 as of 1919. Even Judge Hand's meager figure of $2,000,000 for the appellee, plus the $1,926,709 of Astoria investment in working capital as of December 31, 1918 (which his findings allowed), amounted to $3,926,709 as of that time, or only $73,291 less than the appellant claims would be sufficient now, with wages higher and the appellee's sales meanwhile increased 6,000,000,000 cubic feet a year. Yet Judge Hand expressed his opinion of the $2,000,000 part of that total very frankly.

For the slurring accusation made against Judge Winslow at page 86 of the Attorney-General's brief, there is no warrant whatever, as shown under Point Eight, *ante*. Judge Winslow reviewed the record before him as carefully as Judge Hough and Judge Hand reviewed the earlier records before them, *with this difference*: In the record before Judge Winslow, counsel for the Attorney-General had given that jurist no testimony to review, but had left the appellee's estimate wholly uncontradicted, on a matter which is wholly one of competent judgment and experience, upon the particular facts.

See cases cited, *supra*.

From the foregoing review of the uncontradicted evidence and the decisions, we conclude that there can be no possible warrant for the Attorney-General's demand that the allowance for working capital should be further reduced, below the inadequate sum fixed by the Special Master. If anything, there should be increase to the actual sums shown by the undisputed testimony.

POINT TWENTY

UNDISTRIBUTED STRUCTURAL COSTS

The appellant set out as one of his principal contentions (Statement of Points, R. 3075) that

> "There is no justification for 'structural overheads' beyond those appearing in the books and included in the so-called investment."

The appellant's assignments of error elaborate a claim that the Special Master and District Court erred grievously in the findings made for these undistributed but actual structural costs (R. 331). The appellant's brief alleges (page 2) that all of the errors assigned "will be relied upon."

This characteristic contention of the appellant seems speedily to have encountered at least two difficulties:

> (1) It asked this Court to ignore, not only the *uncontradicted* evidence in this case, but even this Court's own recent ruling on this point in the *Ohio Utilities Company* case; and
>
> (2) Belated examination of the Special Master's findings probably disclosed that he had actually cut the undistributed costs to about the sum demanded by the Attorney-General, and had included them in present value at a figure *unprecedentedly* low.

In consequence, the appellant's brief makes no effort to sustain the point above quoted or the assignments of errors above referred to. We beg leave to refer briefly to these undistributed structural costs and what the Special Master and District Court did as to them, because the fact that the Special Master cut his allowance for these costs to

less than 3.65 per cent. of the "bare bones" physical property, as a part of his finding of the present value of the appellee's property, and thus allowed for these undistributed elements a sum not exceeding their book cost, shows how sharply he decided many of the controversial questions against the appellee and how conservative his findings of present value in fact are.

As counsel for the Attorney-General said, at page 233 of his brief before the Special Master *in this case,*

> "In at least these two latter suits [the *New York and Queens Gas Company* and *The Bronx Gas and Electric Company* cases] the present Master cut Colonel Miller's estimates of undistributed structual costs so unsparingly that the hint would hardly have been lost upon any other expert."

In *The Bronx Gas and Electric Company* case, as in the case at bar, the present Master allowed for undistributed costs, as a part of the present value, only the book cost of such items as appeared in identifiable form in the books. This was serious error, which reduced by many millions of dollars the value which soundly and conservatively should have been found.

The Special Master and District Court cut most drastically the sums shown by the uncontradicted testimony as required for these undistributed costs

The fact is that, as shown in detail in the appellee's exceptions to the Special Master's report (Exceptions Nos. 17 and 18; R. 226-227), the Special Master and District Court reduced the allowance for these undistributed costs far below the sums shown by the undisputed testimony, and there could be no basis for these reductions or for

any further reduction, unless, contrary to the recent ruling of this Court, the present value of these items is controlled by the original outlay for them and may not take into account at all a reasonable and unchallenged estimate of their *present* cost.

Colonel Miller's estimate of these undistributed costs, for all of the tangible property devoted to the service of the appellee's gas consumers, totalled $47,366,547.13, of which the details are given in Plaintiff's Exhibits Nos. 856, 886-X, 890, and 868 (R. 2443, 2792-2800, 2644). This sum; although shown by uncontradicted evidence, was reduced by the Special Master to *$28,417,449 in his finding of present reproduction cost* (Findings Nos. 72, 73, 77, 78, and 79; R. 186-190) and to $3,927,726.31 in his estimate of *present value* (Findings Nos. 97-102; R. 200-202). The appellant demands that this absurdly small sum be further reduced (Brief, pages 35-37), although he did not even appeal from the allowance of the full amount of Colonel Miller's estimate for these items, in the case most recently before the Special Statutory Court!

To re-state the matter in *percentages:* According to the uncontradicted testimony in this case, these undistributed costs amounted to 37.48 per cent. of the "bare-bones" reproduction cost of the inventoried physical property, on a sub-contract basis. To reach his estimate of *present reproduction cost,* the Special Master reduced this 37.48 per cent. to 25.49 per cent., and allowed only this lesser sum as a part of his *replacement cost.* But in finding and stating his *present value* of the same property, he allowed for *all* these "overheads" only 3.65 per cent., or less than one-tenth of the lowest *estimate* shown by competent engineering testimony. Yet when, on the testimony of the same witness, another Special Master allowed the New

York and Richmond Gas Company, *as a part of the present value of its property,* more than 33 per cent., instead of a mere 3.65 per cent., the Attorney-General did not even appeal to this Court from the 33 per cent., but has concentrated his fine energies on obtaining a reduction in the 3.65 per cent.!

Recent decisions as to undistributed structural costs

In justice to the learned Special Master, it should be mentioned that his drastic ruling against the appellee in this matter ante-dated the decision of this Court in the *Ohio Utilities Company* case, *supra.*

In that case, the Ohio Commission had refused to find the "undistributed costs" in the uncontradicted sums estimated by the engineers as reasonably required, and had allowed only the outlays shown as the original cost of these "overheads," in the books. This adherence to original cost, rather than to competent estimates of the present replacement cost of these elements, was held to be such error as to require the setting aside of the order of the Ohio Commission. This Court said:

> "Reproduction value, however, is not a matter of outlay, but of estimate, and should include a reasonable allowance for organization and other overhead charges that necessarily would be incurred in reproducing the utility."

In *New York and Richmond Gas Co.* v. *Prendergast* (10 Fed. [2nd] 167), the Special Statutory Court took similar action, by way of increasing to the full amounts shown by the uncontradicted opinion testimony the allowances which had been fixed by the Special Master in a manner which gave some weight to original cost. The Court said:

"These costs are for *actual* expenditures. They are *inescapable* outlays of money. They were principally construction overhead charges but they were actual costs and go into the fair value as would any material or labor costs."

See, also,

People ex rel. New York State Rys. Co. v. *Pub. Serv. Comn.,* 202 App. Div. 576;

Brooklyn Borough Gas Co. v. *Prendergast,* decided October 2, 1926; not yet officially reported;

Westinghouse Electric & Mfg. Co. v. *Denver Tramway Co.,* 3 Fed. (2nd) 285.

It may be noted, in passing, that the engineering witness whose estimate of these undistributed costs was accepted *in exact amount* and allowed in full as a part of the physical property, in the *New York and Richmond Gas Company* case and in the *Brooklyn Borough Gas Company* case, was Colonel A. S. Miller, who used therein the same percentages and bases of computation as he applied in his estimate in behalf of the appellee.

In the recent *New York and Richmond* case, although the Special Statutory Court allowed that gas company the full undistributed costs testified to by Colonel Miller, the Attorney-General did not even appeal that case to this Court.

Undistributed structural costs are actual and inescapable elements

Colonel Miller's inventory and appraisal set out the various items of property, classified and distributed according to the Uniform System of Accounts for gas cor-

porations, as prescribed by the defendant Commission (Ex. No. 253; R. 363).

Colonel Miller inventoried and appraised the appellee's physical property according to these classifications of accounts and stated the reproduction cost of the various items on unit prices representing a *sub-contract basis, i.e.,* without any allowance or provision in such unit prices for the various items of undistributed but actual structural costs set forth in the exhibits above referred to and described at length by Colonel Miller in his Exhibit No. 856 (R. 2441-2455).

Although these elements of reproduction cost are not assigned and distributed to the specific items of tangible property, they are, none the less actual *bona fide,* inescapable elements of cost, just as actual and unavoidable as the cost of brick or lumber or cement.

> *Re Chesapeake & P. Tel. Co.,* P. U. R. 1916 C, pages 925, 951 (excellent discussion by Towers, chairman);
>
> See, also, other cases above cited.

As clearly appears from the Special Master's opinion (R. 108-119), he reduced Colonel Miller's well-supported and uncontradicted estimates of these undistributed costs to a sum representing only 3.65 per cent. of the present value of the "bare-bones" physical property, by doing two things:

> (1) *Principally,* he did exactly what the appellant now contends he should have done, *viz.,* struck out all of Colonel Miller's *estimated* figures, as to any items for which he could find any amounts set out in capital accounts on the books, and then substituted these "actual outlays," for Colonel Miller's estimated reproduction costs of these elements; and

(2) To a lesser extent, where he could not substitute "actual outlays" from the books, he reduced the estimated present costs to amounts which impressed him as reasonable, *and he did this despite the utter absence of evidence requiring or sustaining such a lower figure.*

The reasonableness of the undistributed costs testified to by Colonel Miller have been attested by other tribunals

In fairness and in fact, no part whatever of the sums estimated by Colonel Miller should be eliminated for any purpose of determining this case.

The percentages and bases of computation used by Colonel Miller for these undistributed items are approximately the same as have been applied, by him and by others, to all gas company construction work, in and near New York City; and they have generally been accepted and upheld.

We have already referred to the fact that, in the *New York and Richmond Gas Company* case, when the Special Master reduced to 19 per cent. the allowance of approximately 31 per cent. testified to by Colonel Miller, the Special Statutory Court held this was error and restored, as a part of the present value, the full amount estimated by Colonel Miller for these undistributed costs.

In the *Brooklyn Union Gas Company* case, in the Eastern District, Judge Campbell affirmed and upheld allowances by Special Master Latson, for these undistributed structural costs, as a part of present value, in a sum in excess of twenty per cent.

In *The Bronx Gas and Electric Company* case, in the State Supreme Court, Colonel Miller's estimate for the undistributed structural costs amounted to 31 per cent. of

the cost of the tangible property. The Honorable George V. S. Williams, as Referee, allowed and found these items in full, in exactly the items and form used by Colonel Miller in this case and set out in Exhibit No. 856 (R. 2441-2455), and with the same percentages for each item; and the Appellate Division, on February 21, 1924, unanimously affirmed his judgment and findings (28 N. Y. State Dept. Rep. 329; P. U. R. 1923 A, 255; 208 App. Div. 780).

The Public Service Commission, in *The Bronx Gas and Electric Company* case in 1915, appears to have allowed 34 per cent. for these items (6 N. Y. State Dept. Rep. 76, 94). The Commission reviewed various decisions in which allowances had been included in appraisals of amounts aggregating from 20 to 21½ per cent. for contractors' profits, engineering, supervision, administration, contingencies, etc., and from 10 to 20 per cent. for preliminary and development expenses, organization, interest and taxes (*Ibid,* pp. 102-103).

In inventorying and appraising the plant and property of the New York Mutual Gas Light Company, to compute the price to be paid for it by the appellee with the approval of the defendant Commission, Colonel Miller included the same items of undistributed costs, used the same percentages, and showed them in his inventory and appraisal, in the same form as in Exhibits Nos. 856, 866X, and 868 (R. 2441; 2538; 2800, folio 4107) in this case. The New York Public Service Commission, in 1922, checked this inventory and appraisal, confirmed the price thus computed, and authorized the appellee to pay such price and to carry the elements thereof, including such undistributed items (computed by Colonel Miller's usual percentages), into its books (Ex. No. 198, R. 359).

Local courts, State and Federal, and the defendant Com-

mission, have often accepted and found Colonel Miller's computations and percentages on these items (see Finding No. "34" in *New York Mutual Gas Light Co.* v. *Newton;* affirmed by this Court *sub nom Newton* v. *New York Mutual Gas Light Co.,* U. S.).

Some of the figures set forth in the Commission's opinion of August 30, 1922, in Case No. 79 (Ex. No. 209, R. 360) as to the gas rates to be charged by the appellee and its system companies, were arrived at by acceptance of Colonel Miller's present computations and present percentages.

In *Milton* v. *McGowan W. Lt. & P. Co.* (P. U. R. 1923A, p. 755), the Wisconsin Railroad Commission allowed 25 per cent. for these items.

In Re Idaho Power Company (P. U. R. 1923B, p. 52), the Idaho Commission allowed for these items 31 per cent.

Mr. L. R. Nash, in a pamphlet published in Stone & Webster's *Public Service Journal,* in October, 1912, entitled "Valuation of Public Service Properties," said:

> "A special commission in Massachusetts used 23 per cent. in its valuation of the electric railway properties of the New York, New Haven & Hartford railroad. The Washington Commission has used 28 per cent. in an electric railway rate case. The Traction Valuation Commission used 25 per cent. in appraising the Chicago surface railways. The Boston Transit Commission found the actual cost of its work of designing and constructing the Boston subways was 23.6 per cent. of the physical costs, not including brokerage and some other costs encountered in private work."

In the *Kings County Lighting Company* gas-rate case (2 P. S. C. R., 1st Dist., N. Y. 659), years before the war, the New York Commission allowed for these items 21.8 per cent.

In the valuation by the Great Britain Railway and Canal Commission of the property of the National Telephone Company, the Commission added 31.4 per cent. of the reproduction cost of over ten million pounds sterling. The case is reported in 16 *A. T. & T. Co.*, Com L. 491.

In the most recent utility case decided in Greater New York (the *Brooklyn Borough Gas Company* case, *supra,* in which the opinion was filed on October 2, 1926), the evidence as to these undistributed costs was carefully reviewed, with the result that Colonel Miller's bases and estimates were accepted, in amounts aggregating more than 30 per cent. of the present value of the physical property. The engineering witness in behalf of the Attorney-General (the appellant in this case) estimated that no more than 18 per cent. should be allowed for these undistributed costs. Yet here the same public officer attacks 3.65 per cent. as unreasonable and excessive!

Time elements produce variances in the amounts when translated into percentages

The bases of computation used by Colonel Miller, for these undistributed items, are generally the same as to all gas company construction work, in and near New York City, and, as already shown, the other gas companies have generally been allowed substantially Colonel Miller's full percentages, ranging from 20 per cent. upwards, instead of the mere 3.65 per cent. allowed by this Master.

The percentage of the undistributed structural costs to the "bare-bones" or direct costs, of necessity varies somewhat in different properties, according to the construction conditions, and so cannot be properly measured in the terms *merely* of the aggregate percentage for all of the properties.

The period required for construction affects materially the amount of interest during construction and taxes during construction incurred upon a given project, and so will affect the relationship of the aggregate undistributed costs to the direct structural costs.

The reasonableness of the amounts estimated to be necessary, as a matter of engineering and business judgment, must be considered in connection with each project or unit individually; and for that reason, the uncontradicted opinion of a competent authority must control, as to the amount to be allowed a company such as the appellee. His estimate may not properly be reduced *for the sole reason that lower figures are sought or preferred.*

Ohio Utilities Company case, *supra.*

We think it inescapable that the 3.65 per cent. allowed by the Special Master for these undistributed costs as a part of present value, should be greatly increased, to substantially the sums shown by the undisputed testimony.

POINT TWENTY-ONE

GOING VALUE

The appellant contends (R. 3075; Brief, page 87) that

> "In this case, upon all of the circumstances, there should be no separate and additional allowance made for 'going value,' as there is no historical basis for such allowance."

Counsel for the appellant naturally refrains from telling this Court

(1) That it was the undisputed testimony of this case, shown by a multitude of convincing detail, that this appellee *possesses* a going value, substantial in amount, over and above all its physical property and working capital; and

(2) That there was no testimony presented by anyone which estimated or indicated for all of the elements of the appellee's going value a *present worth* of less than $25,000,000.

The appellant's discussion of the existence and amount of the appellee's going value proceeds, from start to finish, upon unwarranted assertions as to what the Special Master did, and incorrect and incomplete statements as to the contents of the present record and as to matters wholly outside it.

For example, the appellant asserts, in the first sentence of his point that (p. 87)

> "The Master allowed $9,000,000 for 'going value,' *calculating this sum upon a basis of ten per cent. of the value of the tangible property of the plaintiff as of December 31, 1923* (p. 103)."

The Master's discussion of going value is at pages 101 to 105 of the transcript, and a reading of it discloses that he did not reach his amount by applying that percentage or any other. He *said* that (R. 103):

> "Although no definite percentage has been laid down as representing the measure of the 'going value' of a public utility company, examination of the cases has shown that *Courts have generally found* an amount approximating 10 per cent. of the sum found as the value of the tangible property, as fairly representing the 'going value.'"

He *allowed* as the appellee's going value, however, a sum which is less than ten per cent. of the investment and only 7.7 per cent. of "the sum found as the value of the tangible property."

Appellant's brief next asserts that the Master *relied* on three cases, out of the many which he cited and quoted on this subject (R. 101-105), and then tries to distinguish these cases and demolish the "straw man" thus set up. The fact is that the learned Special Master's discussion of going value is an elaborate presentation of reasons why he did not feel that, as to this particular company and in this particular case, he ought to allow for this element as large a sum as the proofs showed and as he realized would be warranted in the case of so large a public utility otherwise situated and circumstanced.

True, the Special Master suggests that in some cases, various Courts and Commissions—doubtless acting upon the evidence presented before them—have made allowances for going value which amounted to ten per cent. of the sums found as the present value of the physical property. Even on this basis, the appellee's allowance should have been at least $12,500,000, rather than $9,000,000.

But there was no testimony in the present case to sustain such a percentage as applicable to the facts of the appellee's situation. *All of the evidence demonstrated and stated substantially higher percentages.* The Special Master's reference to a "ten per cent. rule" was not derived from any evidence here, but was derived from averaging the determinations of various tribunals which presumably were governed by the evidence adduced *before them.*

With the defendants producing no testimony challenging the clear proofs of the *existence* of going value as to this

appellee, and with the testimony of several highly competent witnesses undisputed that the present worth of these elements of going value exceed $25,000,000, we do not believe that the *appellant* can be heard to complain that the Master and District Court allowed $9,000,000 for going value. At least where the possession of going value by a particular company is uncontested in the proofs submitted on the trial, any difficulty relates to the amount to be properly allowed; and if sufficient and proper evidence is before the Court, the ascertainment of the amount of going value presently possessed by a given public utility enterprise becomes a matter of reasoned judgment from all of the pertinent facts.

A few months subsequent to the drastic action of this Master, this Court held, as we understand it, that the amount shown by the proofs to be the present value of an item or element of property, even though intangible in character, may not be reduced and limited to its original cost or to any amount which the fact-finding body deems proper, if such reduced amount is less than the amount shown by uncontradicted evidence.

> *Ohio Utilities Co.* v. *Public Utilities Comn. of Ohio, supra.*

This rule of the *Ohio Utilities* case was specifically applied to going value, by Circuit Judge Lewis in *Westinghouse Electric & Mfg. Co.* v. *Denver Tramway Co.* (3 Fed. [2nd], 285), in which the Federal Court held that the Special Master was not, and could not in any event be, justified in reducing the allowance for going value below the lowest estimate which was supported by the testimony, saying (page 298):

> "There remains to be added an amount for going

concern value. On this subject the City declined to offer any proof. The lowest amount named by a witness for the receiver was $2,900,000 and the highest $4,500,000. The master allowed $1,500,000. * * * I am firmly of the notion that each of these witnesses knew much more about what it would probably cost to put a skeleton street railway plant in successful operation than I do. I know nothing on the subject. I am sure they each knew a great deal; and I see no escape from accepting the lowest amount named in the testimony."

The New York Courts require the allowance of going value as a part of utility property

The Appellate Division for the Third Department of the New York Supreme Court, which by statute is made the highest tribunal for the review of the rate decisions of the New York Public Service Commission as of right, has decided that the rule here contended for by the Attorney-General may not be applied to gas and electric companies in New York State. In *Matter of Peoples' Gas and Electric Company of Oswego* v. *Public Service Commission* (214 App. Div. 108; 211 N. Y. Supp. 662; decided July 17, 1925), the Court reversed a determination of the Commission which had failed to make a specific additional allowance for the element of going value, and held that the Commission could not ignore "oral testimony of competent witnesses as to the amount of the going value."

The New York Commission, in refraining from making any *specific* allowance for going value, had taken the negative position that "there is no evidence before the Commission on which going value can be allowed." The Court held that the relator did have going value and that allowance therefor must be made.

The Attorney-General of New York would seem to have no proper ground of complaint because this Master applied most conservatively to this appellee the rules of evidence and valuation which the New York Courts have laid down for gas and electric companies in that jurisdiction.

We know of no instance in which this Court has disturbed a finding which made an allowance for going value, where, as here (1) the existence of going value as to the particular utility has been admitted or demonstrated, and (2) where competent proof has been offered from which the present worth of this element of intangible property may reasonably be estimated, in the exercise of an experienced business judgment. It seems to be now the consensus of opinion and authority, in both the Federal and the State Courts, that an adequate allowance for the going value of a utility property must be made, according to the proofs, in a rate or confiscation case as in any other.

City of Fort Smith v. *Southwestern Bell Telephone Co.*, 294 Fed. 102; U. S. ;

Bluefield Water Works and Improvement Co. v. *Public Service Commission of West Virginia*, 262 U. S. 679;

Galveston Electric Co. v. *City of Galveston*, 258 U. S. 388;

Monroe Gas Light and Fuel Co. v. *Michigan Public Utilities Commission*, 11 Fed. (2nd), 319 (Special Stat. Ct.); decided February 27, 1926; S. C. on preliminary injunction: 292 Fed. 139;

New York Telephone Co. v. *Prendergast*, 300 Fed. 822 (Spec. Stat. Ct.); S. C. on further hearing: 11 Fed. (2nd) 162;

Denver v. *Denver Union Water Co.*, 246 U. S. 178;

New York and Richmond Gas Co. v. *Prendergast,* 10 Fed. (2nd) 167;

Omaha v. *Omaha Water Co.,* 218 U. S. 180;

National Water Works Co. v. *Kansas City,* 62 Fed. 853, 865;

State Public Utilities Commission v. *Springfield Gas and Electric Co.,* 291 Ill. 209;

Streator Aqueduct Co. v. *Smith,* 295 Fed. 385;

Lincoln Gas Co. v. *Lincoln,* 250 U. S. 256, 267;

Venner v. *Urbana Water Wks. Co.,* 174 Fed. 348;

Michigan Public Utilities Commission v. *Michigan State Telephone Co.,* 228 Mich. 658; 200 N. W. 749;

Town of Milton v. *Railroad Commission of Wisconsin,* 185 Wisc., 294; 201 N. W. 381;

Buck as Mayor of Buffalo v. *International Railway Co.* (New York State Public Service Commission); 27 Rate Research 40, 192;

Chesapeake and Potomac Telephone Co. of Baltimore City v. *Public Service Commission of Maryland* (Special Stat. Ct.; Dist. of Maryland) 3 Fed. (2nd), 938;

Georgia Railway and Power Co. v. *Railroad Commission* (U. S. Dist. Ct., N. D. of Ga.; 3 Fed. [2nd], 938; decided September 25, 1924; report of Special Master confirmed and decree entered February 2, 1925;

Re New York Telephone Company (New Jersey Board of Public Utility Commissioners; P. U. R. 1925C, pp. 767, 783; decided December 31, 1924);

Re Minneapolis Street Railway Co., Minnesota R. R. and Warehouse Commission; 26 Rate Research, 275; decided March 6, 1925;

Columbus Gas Light Co. v. *Public Service Commission of Indiana,* 193 Ind. 399; 140 N. E. 538;

Southern Bell Telephone and T. Co. v. *Railroad Commission of South Carolina,* 5 Fed. (2nd), 77, 87;

Citizens' Gas Co. of Hannibal v. *Public Service Commission of Missouri,* 8 Fed. (2nd), 632;

Kings County Lighting Co. v. *Prendergast,* 7 Fed. (2nd), 192;

Brooklyn Borough Gas Co. v. *Prendergast,* decided October 2, 1926; not yet reported.

Modes of proof recognized in the recent decisions

In the instant case, it may be added, the plaintiff's proofs were along the lines which have been followed or indicated in the significant adjudications. In fact, the proofs in this case parallel, *inter alia,* those which were the basis for Judge Youmans' finding in the *City of Fort Smith* case, recently affirmed by this Court. In that case, Youmans, *D. J.,* held that (294 Fed. 102, at page 105):

> "The decision in the case of *Des Moines Gas Co.* v. *Des Moines* was neither modified nor overruled by the decision in the *Galveston* case."

As quoted on pages 105 and 106 of the opinion of Judge Youmans, the kind of proof offered by the company was along the lines, and based on the same principles, as the studies made by Mr. Woods and Mr. Addicks in this case. The study submitted by the telephone company in the *Fort Smith* case is quoted at length by the Court, and is shown to be an estimate of the present cost of securing certain elements and advantages, if they were not now already possessed. As to this method, the learned Court said:

> "The method followed in the foregoing quotation is not subject to the criticism made by the Supreme Court in the *Galveston* case. *The above method does not undertake to capitalize past losses.* It assumes a reconstructed plant without business, and gives the cost of securing business of the character and magnitude the company now has in Fort Smith."

Consequently the District Court held that an allowance amounting to approximately 15½ per cent. of the reproduction cost new of the tangible property, should be made for going value, on this basis; and this Court did not disturb that finding.

This seems to us to have considerable bearing upon the assertion that the appellee (Brief, p. 94) "quite conclusively has run afoul of the opinion of the Supreme Court" in the *Galveston Electric* case. In that connection, reference may also be made to the decision of this Court in *Georgia Railway & Power Co., et al.* v. *Railroad Commission of the State of Georgia, et al.*, on June 11, 1923 (262 U. S. 625). In that case the Commission and the District Court allowed for going value the sum of $441,629 out of a valuation of $5,250,000, upon which valuation the Commission had ordered a reduction in the price of gas to $1.55 per thousand cubic feet (pp. 629, 638). The company contended that the going concern value was at least $750,000 and urged that the allowance below should be increased. Mr. Justice Brandeis, in his opinion for the majority of this Court, said (page 632):

> "These are findings of fact made by the Commission and approved by the lower Court. We are not satisfied that either finding [referring to working capital and going concern value] is erroneous."

In the preceding paragraph of the opinion, Mr. Justice

Brandeis discussed recent deficiencies in earnings due to rates voluntarily continued by the Company, and said (page 632):

> "That past losses are not to be capitalized as property on which the fair return is based was held in *Knoxville* v. *Knoxville Water Co.*, 212 U. S. 1, 14; *Galveston Electric Co.* v. *Galveston*, 258 U. S. 388. Here this conclusion seems even clearer than it was in those cases. *The losses* under consideration in the case at bar *were obviously not a part of development cost.* They were due to insufficiency of previous rates."

The *Georgia Railway* case has seemed to us to contain a clear intimation that losses which are a part of development cost, as distinguished from losses due to insufficiency of previous rates, may contribute to going value.

In so far as going concern value has been said in the case of *Houston* v. *Southwestern Bell Telephone Company* (259 U. S. 318, 325) to depend "upon the financial history of the company," we submit for consideration that the significance of this phrase need be no broader than the decision cited as authority for this criterion, *viz.*, the decision in *Galveston Electric Company* v. *Galveston* (258 U. S. 388). In that case, an allowance for going value and development cost was excluded only " in the sense in which the Master used these terms," and that is in the sense of "a capitalization of the net balance of alleged past deficits in accordance with what was said to be the Wisconsin rule," or of "successful operation or profitableness of the business."

In the *Bluefield* case, the allowance for going value exceeded *ten* per cent., and this Court did not condemn that finding. In *New York and Richmond Gas Company* v. *Prendergast, supra,* the Special Statutory Court made find-

ings which allowed for going value more than *fifteen* per cent. of the reproduction cost new of the tangible property (excluding working capital but including undistributed costs) or about *sixteen* per cent. of the total present value of such property as found by the Court. In *Southern Bell Telephone Co.* v. *Railroad Commission of South Carolina* (5 Fed. [2nd], 77), the allowance for going value was in excess of eleven per cent. of the physical property. In *Citizens' Gas Co. of Hannibal* v. *Public Service Commission of Missouri* (8 Fed. [2nd] 632, 634), the allowance by Judge Reeves for going value was 14 per cent. of the value fixed by him for the tangible property.

In the *Monroe Gas Light Company* case, before Denison, *C.J.*, and Tuttle and Simons, *D.JJ.*, the *per curiam* opinion filed on February 27, 1926, said, as to going value:

> "Reported decisions show estimates as high as 25 per cent. or 30 per cent. of the cost of tangibles. These may be extravagant. Seemingly there is no definite percentage relation. At the same time, the proposition that a plant of this kind and in this business and in successful operation, with customers somewhat permanently attached for its capacity output, is worth 10 per cent. more than the skeleton would cost, seems not unreasonable—no circumstances *contra* appearing."

Counsel for the appellant emphasizes the fact that in the *Brooklyn Union Gas Company* case, both the Special Master and Judge Campbell in the District Court refused to include in the "rate base" any allowance for going value (Brief, page 98), *upon the evidence offered in support of going value in that case.* This only illustrates the fact that the New York City gas companies have not been able to obtain favorable findings as any matter of course. If the Master or Court did not feel that a company had suffi-

ciently and convincingly proved any of its claims, an adverse ruling was made thereon. In the *Brooklyn Union* case, the company offered proof of going value by a single witness, who dealt with only one aspect and one method of estimate. In subsequent cases before the Special Statutory Court (*New York and Richmond Gas Co.* v. *Prendergast, supra; Kings County Lighting Company* v. *Prendergast, supra*), proofs of going value were submitted on a more comprehensive basis; and Judge Campbell concurred in holding that these companies had proved their right to allowances of more than ten per cent. for going value.

Controlling principles as to going value

Before taking up the details of the exhibits and testimony presented by the appellee, we will summarize briefly what the principles upon which the proofs of the existence and amount of going value have been predicated in this case:

1. There is an element of going value which properly enters into the ascertainment of present value, as to the property of a public utility which has become a going concern.

2. Going value is created by the attainment and possession of some or all of various *elements and advantages* which inhere in a property which has become a going concern, as compared with a property similar in physical completeness but not yet coordinated and operated and possessed of an attached business.

3. These elements and advantages do not exist to the same extent and in the same ratio in all public utility properties, yet some of them exist to some extent in every going concern.

4. Their *existence* is demonstrable, as is also the fact that they attach value to the property and enterprise as a whole. The allowance of the value of the physical property cannot be said to embrace the element of going value, as that allowance is for no more than the value of the component physical parts of the plant, as assembled in one plant, ready for successful operation (*City of Minneapolis* v. *Rand*, 285 Fed. 818, 830).

5. It usually has cost money to obtain, create and develop many or most of these elements and advantages, although some of them may have in fact been acquired through adventitious circumstances at no expense to the company; at all events it would cost money to obtain or replace them today, if they were not already existent and possessed.

6. All plans for the establishment and development of public utility enterprises take into account the fact that it does cost money to acquire and attach these elements and advantages. Large sums are invested in such projects in reliance upon the assumption of able business men that the cost of acquiring or replacing such elements and advantages can be estimated with reasonable certainty, as a matter of judgment derived in part from suitable computations and pertinent facts.

7. Negotiations between business men for the purchase and sale of going public utility enterprises take consciously into account the fact that these advantages have been secured, to such extent as may appear in the particular transaction; and the present possession of these elements and advantages is a factor commanding compensation therefor by the purchaser, over what he would pay for the property if these elements were absent altogether or were possessed only to a lesser degree.

8. The absence of a ready formula or computa-

tion to *measure* "going value" as one may meter gas or weigh coal or measure oil, is no challenge of the *existence* of such an element of present value.

9. The mere fact that the value of these elements cannot be determined with mathematical accuracy, or, indeed, that it is difficult to determine such value in any exact amount at all, is of no great consequence. That is a difficulty encountered by lawyers and the Court in every action to recover damages for breach of contract (*Wakeman* v. *Wheeler and Wilson Co.*, 101 N. Y. 205), as well as in far more elusive and intangible relationships; and it is the judicial tradition that the Court will ascertain the amount in dollars from all the relevant facts adduced, and will do so as a matter of reasoned judgment. That method is the basis of jurisprudence. It is good enough for countless other aspects of life and business. It is good enough for the ascertainment of going value.

10. Inasmuch as this element of present value exists as a practical and demonstrable matter in business experience, its amount in dollars *is susceptible of legal proof and fair judicial determination.* The value of anything which exists and has value can be proved. It is a common-place, in other and less experimental fields of law, to develop competent and sufficient legal proof of the value of intangible elements of far greater elusiveness and uncertainty than this attribute of a going utility, and vast sums of money are invested in reliance upon such evaluations.

11. A distinction should at all times be kept in mind between the *existence* of "going value," the *elements and attributes* which give rise to it in the particular case, and the *methods of proof* resorted to in order to give to it a weight and effect in dollars and cents.

12. The value of any element or attribute of

property is a question of fact, derivable from competent opinion based upon relevant evidentiary facts. The *best* evidence of present value is often, although not at all necessarily, the point of agreement between *opinions* held by experts acting for opposing interests under competitive conditions, *e.g.*, the sum for which the owner will sell and at which a purchaser will buy; but at least in the absence of such a testing of relative opinions in a purchase-and-sale transaction, present value is commonly determined by weighing and analyzing the *opinions* sworn to or certified to by qualified persons in behalf of different interests, and by weighing and analyzing the comparative data upon which such opinions as to value are said to be based.

13. Like other property and value, the *amount* for which going value stands, in dollars, as to a particular utility, is demonstrable and determinable by competent opinion based upon sufficient and pertinent facts; and if an estimate too high or too low is given as to this element by a witness for any party in a particular case, it may be dealt with through the presentation of other qualified opinions as to amount, with proper supporting facts, and by close cross-examination to see whether the facts and computations on which the alleged erroneous opinion was based were complete and well-founded, and whether they fully support the opinion supposed to have been based thereon.

14. In estimating going value for a rate proceeding, no effect should be given to the utility's *actual* early earnings above or below a reasonable return. The estimate must assume *fair regulation*, and eliminate the effect of any other situation as to earnings, if actually existent. "Pioneer losses" should not be capitalized, and weight and effect, in determining the amount of going value, should not be given to actual early losses or operating deficiencies below a fair return, during early years or

the whole period of the company's actual rate history. *Going value* should be distinguished from and kept apart from *good will*, which this Court had defined as the disposition of a pleased customer to return to the same place. *Good will*, therefore, may arise *after* the utility has obtained its customers and has developed its plant and personnel to a point where the service may or may not please the customers.

15. On the other hand, the pertinent inquiry, in a case like that at bar, is (1) as to the elements and advantages, now possessed and utilized by the company, which come within the category of going value; and (2) as to the present worth of those elements and advantages, which present worth may perhaps best be indicated by estimating or demonstrating *what it would now cost* to secure and possess those elements and advantages if they were not already possessed and available in the company's business. Those elements and advantages were no doubt largely acquired during the early years of the enterprise; but neither their present worth nor their present reproduction cost is revealed by an inquiry into the *actual original cost* of acquiring them, years before. Still less pertinent as an index of their present worth or reproduction cost is any offer of proof as to the company's actual losses or operating deficits during the early years when these elements and advantages were being acquired. Such pioneer losses or deficits may have been, and probably were, due to other factors than the acquisition of these elements and advantages, and the amount of the early operating deficits is no guide to the amount of going value. *Per contra*, there may have been no deficits or losses during the time when the elements and advantages were acquired, and yet their possession would create going value.

16. Proof of the present possession of elements of going value and of the *present cost* of acquiring

and securing such elements and advantages, if they were not already possessed and had now to be acquired, does not offend against the concept that actual pioneer losses or early deficits of the enterprise as it then stood, do not constitute a measure of going value. (*Southwestern Bell Tel. Co.* v. *City of Ft. Smith*, 294 Fed. 102, 106.)

17. In proving going value, it has become a common practice to put on the stand the men who know intimately the commercial, financial and engineering history of the enterprise—the men who know at first hand the existence, the usefulness, and the worth, of these elements and advantages. They have had to do with the *acquisition* and *creation* of these elements and advantages. They know whether these elements and advantages have been acquired and are now possessed; they have known what it has cost to acquire and create them. They are in the best position to estimate what it would cost today to acquire and create these elements, if the utility did not already possess them. They know what these things *have cost* and what their acquistion anew *would cost*. They have the long and close familiarity with the property to be valued. Just as an active, competent builder who has built a particular house and has built other houses, will be permitted to give an opinion as to the value of the house and as to the present cost of building such a house, so the men who know the financial, commercial and engineering history are qualified to testify to the *existence*, and then to express and support an opinion as to the *amount* of "going value."

Exhibits and testimony as to going value in this case

We shall not undertake, in this brief, to analyze or summarize in full detail the testimony and exhibits on the subject of going value. Aside from the great mass of perti-

nent and basic material to be found in the appellee's books, accounts and records in evidence, the proofs for the appellee comprised the testimony and exhibits of six witnesses, hereinafter outlined.

The defendants offered no proofs on going value

As already stated, the defendants called no controverting witnesses, and presented no contradicting testimony or exhibits, on this subject. The principal engineering witness for the appellant Attorney-General (Mr. Little) was on cross examination interrogated on the subject, and he testified, as he had in previous cases, that going value exists and should be taken into account, as one of the elements of the present value of property upon which the appellee was entitled to earn a fair return (R. 1908).

Mr. Little also testified that the *amount* of going value inhering in a particular public utility enterprise, was to be determined by the Court or Commission, as a matter of opinion and judgment from all of the facts appearing in the particular record, and could not be ascertained by the mere application of any arbitrary percentage or formula (R. 1908). He said that the percentage of relationship to present value (*not* to original cost) should be used to *check and confirm* the estimate of going value, but that the amount of going value should not be computed by a percentage. In other words, Mr. Little approved exactly the method followed by Mr. Addicks and Mr. Woods, in this case.

If the Special Master had permitted, we would have proceeded to show that under Mr. Little's own testimony and official action, the *minimum* allowance for going value would exceed ten per cent. of the total present reproduction cost of all the property used and useful in serving the appellee's consumers; but the Special Master would not

permit this to be inquired into beyond Mr. Little's statement that, as gas engineer of the Illinois Commission, he had computed going value in an amount equal to at least ten per cent. on fair value. *Mr. Little's testimony confirmed and corroborated the propriety of a substantial allowance for going value in this case.*

The appellee's comprehensive exhibits and proofs

The appellee's uncontradicted exhibits and testimony covered virtually every phase of proof that has been indicated by the reported decisions, and we invite a reading of these presentations, as affording the best reputation of the appellant's aspersions.

Mr. Addicks presented a detailed and comprehensive study of the appellee's going value, which covered many angles of analysis and approach (R. 1595-1632). It indicated a going value substantially in excess of $30,000,000 and stated that $25,000,000 would be a meager minimum. Mr. Addicks eliminated from his computations every doubtful and controversial item, as the text shows. He amplified his study on direct and cross examination.

Mr. Woods likewise presented an analytical and convincing study as to some of the elements of going value, from a slightly different angle of approach. It will be found at R. 1552-1562, with direct examination at R. 1551-1552, with cross and redirect examination at R. 1646-1669. Mr. Woods' study demonstrated the appellee's possession of a going value which it would now cost much more than $25,000,000 to reproduce.

Mr. Davidson presented the statistical and accounting bases for many of Mr. Addicks' analyses and computations, as such data is found in the books and records of the com-

pany. His Exhibit No. 893 (R. 2801-2819) chronicles graphically the financial history and recent experience and costs of the appellee, as to the elements which enter into going value. Mr. Davidson's summaries and analyses, from the appellee's books and records, embody a sound and thorough method of testing the accuracy and reliability of the conclusions which Mr. Addicks predicated in part upon them. This data in Exhibit No. 893 was such as to refute or confirm Mr. Addicks' whole study. It served to demonstrate beyond cavil the accuracy and extreme conservatism of the calculations with which he supported his judgment.

We feel confident in asserting that the studies presented by Mr. Addicks, Mr. Woods and Mr. Davidson, constitute in themselves as complete and conclusive a demonstration of going value as has been offered in any Court. Beyond these three studies and in addition to them, there was presented competent and convincing testimony along the conventional lines:

Mr. Allison, of St. Louis, consulting engineer of the Laclede Gas Light Company and adviser of bankers and investment houses, gave proof as to the elements of going value and outlined the methods by which, in the exercise of a trained business judgment, the amount of going value attaching to a particular enterprise could be fairly ascertained (R. 1369-1371, 1377-1378, 1390-1391). Mr. Allison was not asked to give any figure or percentage, as to the going value of the appellee.

Mr. Alrich, an engineer of recognized competence and experience, presented an exhibit which he had prepared, under instruction, to compute the going value of the appellee according to the well-known "Alvord method," as presented to the American Society of Civil Engineers in 1911 (R. 1632-1636). Although computations based upon

the "Alvord" or "comparative plant" method frequently have been received and considered by Courts and Commissions, and have been the basis for many substantial allowances, the Special Master, in what seemed to us perhaps an excess of caution, refused to accept in evidence the results of applying the Alvord method to the appellee's present situation (Ex. No. 894 for Id.).

We believe that Mr. Alrich's computation—undeniably careful and accurate mathematically—might well have been received and considered, but it was not. If, however, it should be contended that proof based on the Alvord method should have been followed, instead of that presented by the appellee and followed by the Special Master, we may at least point out that, as demonstrated by Mr. Alrich's exhibit, an application of the Alvord method would demonstrate for the appellee (Ex. No. 894 for Id.; R. 1636) a going value of $39,941,168, or an amount higher than was produced by any estimate, opinion or calculation received in evidence in this case.

Colonel Miller, from his wide and varied experience in many cities, including New York, and with virtually every phase of the public utility business, presented proof of the present worth of certain of the elements entering into going value (R. 1562-1572). To these elements he ascribed a present worth of at least $19,188,890 (R. 1562). His testimony was along the lines perhaps most commonly presented as to the going value of gas companies; in many cases in which allowances for going value have been made, no other sort of proofs have been presented and no other aspects of going value covered. The extent and quality of proofs offered here by Colonel Miller have been deemed sufficient to warrant and sustain what might be deemed a *minimum* allowance.

In the present case, the appellee has supplemented the testimony of Messrs. Miller and Allison with the detailed and convincing testimony and studies prepared by Messrs. Addicks, Woods and Davidson.

We shall not undertake to review in further detail the facts proved by the appellee as to its going value. They are to be found primarily in the studies prepared by Messrs. Addicks, Woods and Davidson, to which we refer.

The amount allowed for going value should not be decreased because partly paid for through operating expenses

Contrary to the contentions of the appellant, it seems to be well settled now, by many decisions of the State and Federal Courts, that in estimating the amount and present value of the property of a utility, neither the amount nor the value of the useful property should be diminished by the fact that any part of such property was paid for out of net earnings or even that, in earlier years before regulatory accounting, some part of such property may have been charged directly to operating expenses. This applies to going value as well as to physical property.

Lincoln Gas Co. v. *Lincoln,* 250 U. S. 256, 267;
Michigan Public Utilities Commission v. *Michigan State Telephone Co.,* 228 Mich. 658; 200 N. W. 749;
City of Minneapolis v. *Rand,* 285 Fed. 818, 830;
New York and Richmond Gas Co. v. *Prendergast,* 10 Fed. (2nd), 167;
Grafton County E. L. and P. Co. v. *State,* 78 N. H. 330; 100 Atl. 668.

In the *Lincoln Gas* case, this Court "questioned the

propriety" of a Master's report which decreased the allowance for going value because some or all of the elements had been paid for out of operating expenses. This Court said:

> "Again, we question the propriety of the Master's treatment of 'going value,' which he seems to have estimated at less than otherwise he would have placed it, upon the theory that the company's business had been developed, at the expense of the public, in the expenditure of past earnings exceeding a fair return upon the capital invested, and this without any finding, or any clear evidence to which our attention has been called, that past earnings were excessive."

POINT TWENTY-TWO

DEPRECIATION

The appellant's brief on this subject (pp. 56-77) is based largely on matters outside this record. It pays no heed to the decisions of this Court during the past five years. In so far as it undertakes to set out matters contained in this record, we regret to have to say that it flagrantly misrepresents them. *Because the question of depreciation is not really in this case as a controversial issue, we shall refer only to the major contentions of the appellant.*

The Special Master's statement of what he did as to depreciation is at R. 132. The details of his deductions for the observed, actual depreciation in the used and useful property are in a table on page 307 hereof, *post.* His reasons for such a determination, upon a similar state of the record, were explained by him in his opinion in the

New York and Queens case (1 Fed. [2nd], 351, at 365; appeal dismissed 268 U. S. 708).

The total reproduction cost new, as *proved by the appellee* for all of the property used in serving its consumers, was $216,153,025.31 (see table on page 104, *ante;* Exs. Nos. 873X, 890; R. 2694, 2800, folio 4112; plus going value).

The total reproduction cost, as *found by the Special Master* for the same property, was $162,559,692.48 (R. 191; see table on page 103, *ante*).

The total *present value* found by the Special Master for the same property was $134,101,738.77 (R. 202; see table on page 104, *ante*).

The appellant claims there should be a large further deduction from this present value, *without proof as to its propriety or amount.*

Grounds for appellant's contentions

The appellant's contentions (Brief, pp. 56-77) seem to fall into three groups:

(I) That the Special Statutory Courts, District Courts, and State Courts, in various parts of the country, have developed some strange and unique "heresy," at variance with the rulings of this Court, and that counsel for this appellee have largely induced this widespread error.

(II) That the Special Master should have deducted from the value of the appellee's property something which had no support in the record, and that because the Attorney-General did not prove it and/or the Special Master deduct it, this case should

be sent back to have proof offered which would contradict all of the testimony, including that of the Attorney-General's engineering witness (Mr. Little), in the present record.

(III) That if the case is not sent back, at least the amount of the appellee's reserve for "*contingencies*" should be deducted, in lieu of any proof of actual depreciation.

We shall discuss the above-stated contentions.

(I) As to the claim that this appellee is urging some strange, unsupported view:

Appellant's effort to bestow upon the appellee and its counsel an undeserved compliment is foreign to this record and has no pertinency here; but the impression he is trying to convey may most concisely be answered by referring to three of the most recent decisions of this Court:

Pacific Gas and Electric Co. v. *San Francisco*, 265 U. S. 403;
Board of Public Utility Comrs. of New Jersey v. *New York Telephone Co.*, —— U. S. ——;
City of Fort Smith v. *Southwestern Bell Tel. Co.*, —— U. S. ——; affg 294 Fed. 102.

The appellee has no contention to make in this Court on this subject, and has no need to make any. Its proofs in this case are four-square with those three decisions on this subject, as they are with many other decisions of this Court and the lower Federal and State Courts.

In the conduct of its business and in the presentation of its proofs and arguments in all rate and tax litigation, this

appellee has for many years adhered to the views which have been given finality by these three decisions. If those decisions reflect any new or strange "heresy," the appellee offers no further defense.

1. In the *Pacific Gas and Electric Company* case, the Master had computed an "accrued depreciation," on a "life-table" basis, and had adopted the "modified sinking-fund method" of dealing with it and of providing for this estimated "depreciation." Mr. Justice Brandeis, with whom concurred Mr. Justice Holmes, stated that he could not say *as a matter of law* that

> "the Master and the Court erred in their *findings of fact* as to the amount of accrued depreciation."

The other seven members of this Court held that this treatment of the matter was erroneous *as a matter of law*, and that the amount of depreciation must be ascertained by actual physical observation and inspection, rather than by any estimates or computations based upon age.

As to the basis adopted by the Master in his report in the *Pacific Gas and Electric Company* case, the majority opinion in this Court said:

> "In order to determine accrued depreciation and ascertain true values during the years 1913-1916, the Master applied the 'modified sinking fund method.' Concerning this he said: It involves 'an estimate of the lives of the different structural units, and an annual allowance set aside from the rates received as a reserve for future replacement on a 5 per cent. compound interest curve, the capital basis of return to the owner being depreciated each year in an amount exactly corresponding with yearly additions to the reserve. It is assumed that loss of plant units by obsolescence and inadequacy, as well as by physi-

cal decay, can be forecast with substantial accuracy and provided for in advance of abandonment and replacement.'

"Appellant objects to the application of this method and insists that depreciation should have been ascertained upon full consideration of the definite testimony given by competent experts who examined the structural units, spoke concerning observed conditions and made estimates therefrom. As these examinations were made subsequent to the alleged depreciation for the definite purpose of ascertaining existing facts, we think the criticism is not without merit. Facts shown by reliable evidence were preferable to averages based upon assumed probabilities."

Furthermore, apparently in approval of the principle that accruals or provision for retirements of property need not be made in advance, by burdens on the rates, but should be paid for out of the economies realized and thus affect only the rates charged to the future consumers for whose benefit the retirement is made, this Court said:

"Obviously, under the theory accepted below, appellant worsened its situation for rate-making purposes when it reduced the cost of manufacturing gas. Introduction of successful patented inventions enabled the public authorities to lower the rate base and gather all the benefits. The operating plant, made capable of producing gas at smaller cost was declared less valuable than before. The result indicates error somewhere, either in theory or application of principle.

"Obsolescence of one or more stations and perhaps other property theretofore of great value (possibly $800,000) followed installation of the patents, but the remaining plant plus the patents gave better results. As an operating unit the new combina-

tion had greater value than the old; but the Court below disregarded the demonstrated worth of the element which wrought this change.

> "The obsolescence in question did not result from ordinary use and wear. Certainly it could not have been long anticipated—the patents were of recent conception; to provide for it out of previous revenues was not imperative, if possible. Former consumers were not beneficiaries; only subsequent ones could be advantaged."

Appellee has endeavored, in the conduct of its business for many years, to be faithful to these economic principles, and in its proofs in this and other litigation, it has presented only "the definite testimony given by competent experts who examined the structural units, spoke concerning observed conditions, and made estimates therefrom."

2. In the New Jersey Telephone case (*New York Telephone Company*), on April 12, 1926, this Court presented the unanswerable reasons why even the unexpended balance in a "depreciation reserve" may not be deducted, in determining the value of property upon which a utility is constitutionally entitled to earn a fair return.

3. In the *City of Fort Smith* case, decided by this Court on January 25, 1926, one of the principal points decided by the District Court, and one of the principal "errors" briefed and argued in this Court, related to the amount which should be deducted for depreciation. The company and the municipality had both *admitted* that a deduction should be made from reproduction cost new, for depreciation, to reach the present value of the property. The propriety of such a deduction was not litigated; the contest was as to what should be deducted. The District Court held that only actual depreciation, determined by inspection, need be taken into account in fixing present value,

and that inadequacy and obsolescence are the principal causes of property retirements.

The engineering witnesses for the telephone company submitted estimates as to the *actual* deterioration or depreciation, disclosed by competent inspection. The witnesses for the City of Fort Smith claimed there was a further and "hidden" depreciation, due to the *age* of the property. The issue was stated as follows in the brief for the company before this Court (Telephone Company's brief, page 12):

> "the witnesses for the City considered the age, or elapsed life of the property as the basis for making a deduction in *addition* to the actual depreciation. The Company employed the inspection method, the City the theoretical 'age-life' method."

Upon the trial in the District Court, counsel for the City of Fort Smith stated (Record in that case, page 318):

> "Mr. Miles: In order to save time, we are perfectly willing to stipulate that *if you don't take age into consideration* we are willing to agree on their per cent. condition. I want to qualify that to this extent: if the element covering the length of time each piece of property has been in service is not considered, then we are ready to say that their estimate of it is correct; that our other reduction of it is due to the length of time it has been in service."

The witnesses for the City of Fort Smith then presented testimony that, over and above the actual deterioration, the property had depreciated to the extent of about *ten* per cent. of its value because of the expiration of time since it was first installed. This stipulation and this proof seemed to present the issue very squarely as to the propriety of *a further deduction based on age* or "expired life."

The District Court nevertheless refused to give any effect to the "age-life" method or to any "hidden" depreciation based on *age*. The District Court found and deducted only the *actual* depreciation determined by competent engineering inspection, as defined in the *Pacific Gas and Electric Company* case, and this Court refused to disturb or modify the valuation finding so reached.

It will be noted that in the *Fort Smith* case, the fact of some depreciation of that appellee's property and the propriety of a deduction for such depreciation, were admitted by both litigants. The question was only as to the *amount* and *proper measure* of that depreciation. The *actual deterioration* was proved, by engineering descriptions of its nature and amount, and the "theoretical depreciation" or "expired lives" were proved by "life tables." With all this proof, and the company's admission, before the District Court, only the amount of the actual deterioration was deducted, and this Court did not disturb the refusal to deduct more.

In the case at bar, there was no such admission by the appellee, and the Master and District Court admittedly deducted *all* of the depreciation which was proved by any witness for either side. Proof of "life-table" depreciation was not even before the Court, and the testimony as to the nature, extent and amount of the actual depreciation was undisputed.

Quotations from the 1923 briefs in the New York and Queens Gas Company case

Unable to quote from the present record or recent decisions, the appellant's brief (p. 57) quotes with great emphasis from the brief of counsel for the appellee as sub-

mitted to the Special Master in the *New York and Queens Gas Company* case (1 Fed. [2nd], 351; 268 U. S. 708), *late in 1923,* in which counsel for that company referred to the preponderance of decisions in the United States District Court and the State Courts, to the effect that depreciation of utility property may best be proved by actual inspection and competent engineering estimates, rather than "life-tables," and to the effect that the prudent reserves of a utility to provide for its retirements of property should not be deducted in ascertaining the present value of the utility's property.

Without disclosing the fact that the brief in the *New York and Queens* case was written nearly three years ago, appellant's counsel make much of the fact that this 1923 brief "admitted" that this Court had not *explicitly* passed upon the above-quoted determinations of the District and State Courts. The 1923 brief of counsel for the present appellee pointed out that in a number of cases, notably those of the *New York and Queens Gas Company* in 1922 (258 U. S. 178; aff'g 269 Fed. 277) and the *Consolidated Gas Company* in 1909 and 1922 (212 U. S. 19, and 258 U. S. 165, aff'g 267 Fed. 231), this Court had refused to disturb findings which either made no deduction for depreciation at all (in the absence of proof of any) or deducted only the engineering estimates of the cost to restore the operating units to condition as good as when new; but we said frankly to the Master that this Court had not *discussed* the subject, in any of those cases.

Subsequent to the filing of our 1923 brief in the *New York and Queens Gas Company* case, this Court has rendered its decisions in the *Pacific Gas and Electric Company* case, the New Jersey telephone case (*New York Telephone Company*) and the *City of Fort Smith* case. As we read

those decisions, this Court has now sustained the contentions which we wish to be understood as making.

Furthermore, appellant's brief does not inform this Court that the Special Master and the District Court, in this *New York and Queens Gas Company* case of 1923-24, overruled the Attorney-General's contentions on the law and the facts and sustained the contentions of counsel for the present appellee (1 Fed. [2nd], 351). From this determination that nothing more than actual depreciation should be deducted, in ascertaining the present value of the property of New York City gas companies, the Attorney-General did not prosecute an appeal, and these findings of the District Court became final, upon the dismissal of the appeal (268 U. S. 708).

The preponderance of State and Federal authority

According to the overwhelming weight of authority, in State and Federal jurisdictions, "the law requires deductions only for actual depreciation, just as actual as the present value, and the extent of that depreciation must be ascertained by the same kind of evidence."

Westinghouse Electric and Manufacturing Co. v. *Denver Tramway Co.*, 3 Fed. (2nd), 285;

Monroe Gas Light and Fuel Co. v. *Michigan Public Utilities Commission*, 292 Fed. 139; ruling reaffirmed on further hearing; 11 Fed. (2nd) 319;

Landon v. *Court of Industrial Relations*, 269 Fed. 433, 445;

New York Telephone Co. v. *Prendergast*, 300 Fed. 822 [Spec. Stat. Ct.]; S.C. on further hearing, 11 Fed. (2nd), 162;

Nashville, C. & St. L. Ry. Co. v. *United States,* 269 Fed. 351; 255 U. S. 569;
State of Kansas ex rel. Hopkins v. *Southwestern Bell Tel. Co.,* 115 Kan. 236; 223 Pac. 771;
Havre de Grace & P. Bridge Co. v. *Towers,* 132 Md. 16; 103 Atl. 319;
Bonbright v. *Geary,* 210 Fed. 44 (Spec. Stat. Ct.);
Standard Oil Co. v. *Southern Pacific Co.,* 268 U. S. 146;
Murray v. *Public Utilities Commission,* 27 Idaho 603; 150 Pac. 47;
City of Winona v. *Wisconsin-Minnesota Light and Power Co.,* 276 Fed. 996;
City of Cincinnati v. *Ohio Public Utilities Commission,* ——— Ohio ———; 148 N. E. 817;
Southern Bell Telephone Co. v. *Railroad Commission of S. C.,* 5 Fed. (2nd), 77;
Ottinger v. *New York and Queens Gas Co.,* 1 Fed. (2nd), 351; 268 U. S. 708;
Kings County Lighting Co. v. *Prendergast,* 7 Fed. (2nd) 192, 202, 217; P. U. R. 1925 E, page 5 (Spec. Stat. Ct.); confirming report of Special Master (P. U. R. 1925 C, page 705);
Brooklyn Union Gas Co. v. *Public Service Commission,* 7 Fed. (2nd), 628;
New York and Richmond Gas Co. v. *Prendergast,* 10 Fed. (2nd), 167 (Spec. Stat. Ct.); P. U. R. 1925 E, page 19;
Brooklyn Borough Gas Company v. *Prendergast,* decided October 2, 1926;
Willcox v. *Consolidated Gas Co.,* 212 U. S. 19.

Many of the above decisions hold specifically that a com-

petent engineering report of the extent of any deterioration, coupled with a like estimate of cost to restore the property to condition as when new, measures its depreciation and represents all that needs be deducted from its replacement cost new.

Some State and Federal Courts have held, on economic grounds which seem four-square with the rulings of this Court, that even the amount of the restoration costs should not be deducted, in ascertaining the present value of a utility property which has suffered no loss of capacity or operating efficiency.

> *The Bronx Gas and Electric Co.* v. *Public Service Commission,* P. U. R. 1923 A, page 255; 28 N. Y. St. Dept. Repts., page 329; affd. 208 App. Div. 780;
>
> *Consolidated Gas Co.* v. *Newton,* 267 Fed. 231; 258 U. S. 165;
>
> *New York and Queens Gas Co.* v. *Newton,* 269 Fed. 277; 258 U. S. 178;
>
> *New York and Richmond Gas Co.* v. *Nixon,* 203 App. Div. 860; 204 App. Div. 838;
>
> See, also, *Nashville, Chattanooga and St. L. Ry. Co.* v. *United States,* 269 Fed. 351; *certiorari* denied, 255 U. S. 569.

That interesting question does not arise on this appeal, however, because the Special Master deducted the full amounts which anyone proved as reflecting any depreciation.

(II) As to the claim that this case should be sent back because the Special Master did not make deductions for which there was no foundation in the evidence:

This same demand was made by the Attorney-General and rejected by this Court, in the prior suit of this appellee, where Judge Hand had refused to deduct even the cost of restoration. In the *New York and Queens* case, *supra*, Judge Mayer had refused any deduction, yet none of these findings were disturbed. In many of the cases above cited, the lower Courts deducted for depreciation only the amounts shown as the cost to restore, but none of these cases were reversed or remanded, nor was there any suggestion that necessary proofs had been omitted or ignored.

The Special Master followed the evidence

On any question of *depreciation* in the value of a utility property, just as on any question of *appreciation* or present value, counsel for the appellant still overlooks the fact that a Special Master or Court is under the reasonable constraint of following the evidence presented, under the issues tendered by the parties.

The defendants, upon the trial of the case at bar, offered no proof of the *existence* of any deterioration or depreciation, and no *measurement* of the extent or amount of any depreciation, according to *either* engineering inspection or "life-tables." The undisputed testimony of all the engineering witnesses, including Mr. Little, the Attorney-General's own engineering adviser, was that the appellee's gas plants, stations, and other properties, are all "reasonably efficient," "well designed," and "excellently maintained." The testimony of Mr. Little so far confirmed and corrobo-

rated the appellee's own proofs, that we shall refer first to his testimony in behalf of the appellant.

Mr. Little testified that the appellee's Manhattan plants, in comparison with other gas plants that he had seen in other parts of the country, were "reasonably efficient and well-designed" and were "excellently maintained" with the exception, "perhaps," that at the Mutual plant some of the machines were "not quite up to date" (R. 1877). He said, however, that the Mutual plant, "was in an excellent state of maintenance; not only in the machines but I was agreeably surprised at the state of upkeep of the surrounding parts" (R. 1877).

Mr. Little also agreed that the Astoria plant "was a well-equipped and well-maintained plant" (R. 1877), that he knew no inclined retort system in the country which was operating more efficiently than that at Astoria (R. 1897), and that better results could not be secured at the coal-gas House A than were being secured (R. 1897). The Mutual plant he said was "in a very good state of repair and upkeep. The Astoria is, too. At the 21st Street plant the machines appear to be in good shape, * * *" (R. 1877).

The appellant's sole engineering expert further testified that there had been no "loss of capacity or efficiency as to all of these plants as compared with their capacity and efficiency when they were first built," but that, while the 12-foot machines at the Mutual plant were not of as great capacity as a present 12-foot set would be, they are of at least equal or probably greater capacity than when they were first installed, due to the additions that have been made by the appellee (R. 1878).

The testimony of Mr. Woods

Mr. George E. Woods, the chief engineer of the appellee, who has been intimately familiar with all of the properties for many years, testified that all of them "have been maintained and are maintained in a high state of operating efficiency; the repairs have been attended to, made from time to time when needed, and the operating efficiency of the plants at the present time is as good or better than when installed" (R. 1076); that replacements in the property have been made from time to time as and when needed; that there has not been any loss in the operating capacity of the property since the time of installation of the various plants, but that, on the contrary, there has been an increase in the capacity from the time of such installation; that the effect of proper operation and good maintenance of the properties has been to make their efficiency as good as when new; and that there has been an improvement in the operating efficiency as well as in the capacity of the plants over that which was or might have been attained when the respective plants were first erected or the apparatus was first installed (R. 1076-1077).

There was no loss in the efficiency of the 14th and 42nd Street plants at the time when they were retired, in 1923, as compared with the time when they were originally installed (R. 1149, 1168). His testimony stated his personal observation of the increase in capacity and efficiency at the various plants (R. 1168-1170).

The testimony of Colonel Miller

Colonel Alten S. Miller, who inventoried the apparatus and equipment, testified that during his examination he had

found that the appellee's property "was well maintained, operating efficiently and well suited for the work which was being done," and that they appeared to have been well maintained and to have had repairs, renewals and replacements made as and when needed (R. 1346). His testimony as to his observation of the condition of the property applied also to buildings, and to mains and services to the limited extent to which he had examined them (R. 1346).

He testified that there was no evidence of inadequacy of any of the equipment of the appellee, or of any loss in value due to changes in the art (R. 1515).

As to the Astoria property, Colonel Miller likewise testified that, upon his examination, he had found that property to be in "first class condition, well maintained and in operating condition as good as new" (R. 1472-1473).

As to the East 62nd Street holder property, he testified that it had been well maintained, was substantially in the condition that it was when new, and was operating efficiently, without impairment (R. 1477).

Colonel Miller was specifically asked, on cross-examination by counsel for the defendant Attorney-General, as to which of the three gas plants of the appellee were, in his opinion, the most efficient, and he testified that no one of them could be definitely described as more efficient than any other, when both capital and operating expenses are taken into consideration. Similar testimony was given by Mr. Woods in a comparison between the Astoria operations and the operations at the Manhattan plants (Printed R. 1966-1977; Pltf's. Ex. No. 1035).

The testimony of other engineers

Mr. Alrich, assistant engineer of construction, with his minute and continuous knowledge of the properties, testified that the machines used in the appellee's gas production, "are very efficiently operated" (R. 419).

Mr. Burt, engineer and building contractor, testified that he had found the buildings and appurtenances of the appellee to have been "adequately maintained through repairs and replacements, and were in good condition" (R. 1304).

From his constant daily inspection of the mains and services of the appellee, Mr. Simpson, engineer and superintendent of the distribution system of the appellee, testified that during 1922, 1923 and 1924, he had found them to be "in as efficient operating condition as if they were new. They were well maintained and replacements made when needed" (R. 450).

At page 66 of his brief, appellant asserts that the appellee's mains are and have been damaged by electrolysis. At R. 513, Mr. Simpson testified that electrolysis tests have been made by electrical experts in the Boroughs of Manhattan and the Bronx.

> "Those tests do not show any damage done to the main system as a result of electrolysis."

Mr. Trout, engineer and constructor of dock properties, Chief Engineer of Henry Steers, Inc. (R. 1454), testified that he had made a recent examination of the special reinforced bulkhead at Luyster Creek, Astoria, as well as other examinations on previous occasions, and that he had found the property "exactly as good as new," and that it had been

at all times maintained, except for one accident when a ship ran into it and the wall was repaired and "replaced exactly as it had been" (R. 1458).

Mr. John Vipond Davies, probably the most eminent tunnel engineer in the world, testified that during his examination of the Astoria and Ravenswood tunnels of The East River Gas Company of Long Island City, he had found that

> "The maintenance has been excellent throughout, in both the Ravenswood and the Astoria tunnels. * * * They have been inspected regularly by us and anything that was needed or anything that was observed, the attention of the company was called to such matters; the drainage has been maintained in good shape, and painting, and all other work, wherever such is needed, has been carefully carried out. * * * They are in fully as good condition now as when they were built, both tunnels."

These tunnels are for the most part constructed through solid rock and have no wearing parts, and, Mr. Davies testified, provided proper inspection and maintenance are given to the tunnels, they are not subject to "appreciable deterioration" (R. 1286).

Obsolescence or inadequacy of equipment or other property

During Colonel Miller's cross-examination, counsel for the appellant Attorney-General asked various questions as to the absence or existence at the plants of the Consolidated system of certain types of labor-saving apparatus. Mr. Woods had testified on cross-examination as to the installation and use of automatic stokers, waste heat boilers and automatic controls (R. 1170-1173).

Colonel Miller testified that the selection of a new or more efficient type of equipment involved the question whether the increased carrying charges would balance the decrease in labor costs, and that applied to different types of shaving scrubbers and other units of apparatus. There was no difference, so far as efficiency or economy was concerned, between a cast-iron purifier box and a steel purifier box, or between the use of one of the open type and the use of one of the closed type. The appellee had waste heat boilers in some of its plants, and also automatic stokers at some of its plants. Automatic controls were equipped only at the Astoria and Ravenswood plants, but that was still in the experimental stage. Equipment for quick handling of coal from the barge to the coal pile and from the coal pile to the point of consumption existed at several of the plants of the appellee's system.

Mr. Alrich, on his cross-examination, was required to state, in great detail, the various items of equipment and apparatus at the manufacturing plants of the appellee. Some of the questions seemed to imply that the defendant Attorney-General intended to present testimony, on his side of the case, questioning the modernness or efficiency of some of the existing equipment, but no such testimony was presented.

At the 21st Street Station, the appellee has cast-iron purifier boxes of the wet seal type. It also has, in the same plant and in some of the other plants, steel purifier boxes and purifier boxes of the dry seal type, the choice being largely a matter of personal preference of engineers. Mr. Alrich testified that there was no difference between the efficiency of these various types of purifier boxes.

The Babcock & Wilcox type of boilers has been installed at the 21st Street Station from 1902 to the present time.

Four of the 12-foot sets at the 11th Street plant were installed in 1903, and eight in 1906. The Attorney-General evidently sought to show that 12-foot U. G. I. or Lowe type machines of present-day manufacture were capable of producing at least 3,500,000 cubic feet of gas per day as compared with a capacity of existing machines of 2,500,000 cubic feet per day; but Mr. Alrich showed that different types of sets, although identified by the same number of size, have different manufacturing capacities. The machines installed in 1903-1906 were manually operated machines and their capacity could be increased by putting on hydraulic and automatic operation, which, however, "means a tremendously greater investment."

A suggested criticism of the use of hot scrubbers at the 11th Street plant, as being exceptional, was refuted by Mr. Alrich, who showed that other plants were using hot scrubbers.

Cross-examination was directed toward showing that shaving scrubbers have taken the place of hot scrubbers, but Mr. Alrich testified that shaving scrubbers had a separate and individual function in the series of apparatus used for making gas, the shaving scrubber coming immediately before the purifier box.

As to whether steam engines of the horizontal type connected to blowers, such as are used at the 11th Street plant, are obsolete, Mr. Alrich testified that in the past year a blowing unit just like the one at the 11th Street plant had been installed at the Central Union works (R. 415). It was all a question of the adaptability of the apparatus to the particular station (R. 415).

The Attorney-General's cross-examination as to the use of automatic controls in some plants and their absence from other plants of the appellee proves nothing more than

that they were still in the experimental stage and their adaptability depended upon particular conditions (R. 416-417).

Counsel for the Attorney-General also pointed out that the 11th Street plant had no waste heat boilers or automatic stokers, but failed to show that there would be any resulting economy from their installation; on the contrary, Mr. Alrich testified that "if our study of the question had shown that it would be economical for the addition of waste heat boilers, it would be done." Counsel also made a futile effort to show that the vertical type of boilers in use at the 11th Street plant was obsolete, but Mr. Alrich testified to the contrary (R. 419-420).

Referring to the use of wet seal and dry lute box purifiers at the 11th Street plant, Mr. Alrich testified that the wet seal type was not obsolete (R. 420).

Reference was made by the defendant's counsel to liquid purification plants operated outside of the City of New York, but he failed to furnish any evidence whatever that such a plant would be suitable and economical for the operations of the appellee. In fact the appellee had experimented with the process.

The significance of the retirements of units of property

Mr. Woods, asked on cross-examination as to what factors entered into the determination to retire a unit of plant equipment from service, said that retirements were made either for inadequacy or obsolescence. Inadequacy was the result of an increase in business requiring greater capacity, or of an increase in the capacity of the plant requiring an enlargement of an individual unit, in order to furnish a sufficient amount of service or to effect economies

in operating cost. Retirements for obsolescence would be made where an advance in the state of the art enabled the installation of a new type of apparatus which could be operated at a lesser cost than the existing one, and also enabled the payment of interest on the additional expenditure of money incurred and the amortization of the property to be retired. Therefore, in considering the economies from a new unit of apparatus in place of an existing one, regard must be had to the resulting economy not only in operating expenses, but in fixed charges and the amortization of the property retired (R. 1159-1160).

Appellant's brief does not reliably present the facts

Deterioration affects such operating properties as buildings, plant, and equipment. It does not affect land, corporate or organization costs, going value, working capital, or franchises and rights. The appellant's effort, on pages 64 and following of his brief, to create an appearance of insignificance for the amounts shown by the *undisputed* testimony to represent the cost to restore the depreciable property to condition as when new, is based on a complete distortion, secured by including in his divisor all of the items unaffected by depreciation, and thus producing irrelevant percentages.

We invite an examination of Exhibits Nos. 839, 865, 859, and 867, because they show vividly the thoroughness and care of these engineering inspections and reports of the actual conditions of the properties, and also the detailed estimates of the extent and amount of such deterioration. *Cost to restore was observed, inventoried and estimated in just the same careful, thorough way as the cost to reproduce.*

To enable the Court to get a correct and complete picture of these engineering reports which measure the extent of deterioration, in relation to the reproduction costs proved for the plants, equipment, etc., of the appellee and The Astoria Company (which estimates of reproduction cost the appellant has stipulated to be reasonable and correct; see stipulations quoted on pages 6 to 8, *ante*), the following table may be helpful:

Appellee	*Ex. Nos.*	*Reproduction costs new (direct structural) as proved by appellee and now stipulated by appellant*	*Expenditures to put in condition as new*	*Per cent.*
Buildings and appurtenances (Burt)	838, 838A, 839	$ 8,937,610.00	$ 105,618.00	
Plant and Equipment (Miller)	856, 856A, 865	18,198,605.00	546,407.00	
Total		$27,136,215.00	$652,025.00	2.40
Astoria Company (total property)				
Buildings and appurtenances (Burt)	858, 859,	$ 5,860,332.00	$ 78,534.00	
Plant and equipment (Miller)	866x, 866ax, 867	19,167,711.00	509,869.00	
Total		$25,028,043.00	$588,403.00	2.35
Total of above		$52,164,258.00	$1,240,428.00	2.38

At page 65 of his brief, appellant complains that the appellee still has and uses nearly $14,000,000 of property which it acquired in 1884, which "is therefore aged from forty-two to one hundred years." But this figure includes principally the *Manhattan land*, which has hardly suffered any deterioration or lessening in value from age!

The claimed obsolescence of Manhattan holders

On pages 68 and following of his brief, counsel for the Attorney-General states that "the old, small holders owned by this Company furnish an additional example of inadequacy due to changed conditions." He then undertakes a table and various computations to create the impression that the Court below valued these "old, small holders" "actually higher per unit of capacity than new and up-to-date properties."

Counsel's impromptu engineering judgments are as erroneous as his mathematics. The record does not contain the slightest evidence that any of these holders had become inadequate or uneconomical; the appellant's engineering witness did not even hint at any such thing. There was no testimony to the effect that "the tremendous growth of the City of New York in the last half century has brought about a decrease in the efficient and economical use of the older holders, compared to the more modern and very much larger ones; * * * fewer and larger holders will enable the Company to dispose of the land sites of the smaller holders" (Brief, p. 69).

The storage capacity of any one holder is unrelated to the total population. That affects the storage capacity of all the holders. Holders have to be located in the immediate distribution areas served, at strategic points over

"the district." Density of population may determine the *number* of holders and their *locations*, but not the *size* of individual holders, in an area where many holders are required in order to maintain good pressure and supply.

In outlying areas, where large plots of land are available, holders in excess of 5,000,000 cubic feet capacity are being erected and used, by the appellee as by other companies. Holders in Manhattan are generally limited in diameter by the distance between streets, viz., approximately 200 feet, which makes the 5,000,000 cubic foot holder the maximum size practicable under those conditions. Other essential requirements, within a block, of the gas equipment, often reduce the space available for a gas holder to less than the 200-foot diameter.

The gross cost of a holder and therefore its unit cost is very seriously affected by factors which differ in each particular case, without much regard to age or size; but the appellant and his computations obscure all this. The geological conditions at a given site may be very favorable to foundation construction, or may make an expensive foundation necessary. This stands out clearly, even in the Attorney-General's tabulation. Compare the 5,000,000 foot holder at Twelfth Street and Avenue D, built in 1907, with the two 5,000,000 foot holders built at 111th Street and First Avenue in 1902. The reproduction cost of the Twelfth Street holder is $132,000.00 more than that of one of the 111th Street holders. This is entirely in the foundation, as appears from the details given by Col. Miller in Exhibit No. 856. This exhibit shows that the cost for the *one* foundation of the Twelfth Street holder is more than the cost for the *two* foundations at 111th Street. The short story of this is that at 111th Street the conditions were favorable to foundation work while at Twelfth Street they were

very unfavorable. This additional cost of $132,000.00 for the Twelfth Street foundation represents an additional cost per cubic foot unit of 2.7 cents, which illustrates the unsoundness of the attempted comparisons.

The Attorney-General's table on page 69 and his conclusions in the paragraph which attempts to compare unit costs of the "older" and "newer" holders.

Appellant's computations of the reproduction cost per cubic foot of the holders installed since 1900 omit the following:

Location	*M cu. ft. Capacity*	*Year Built*	*Unit Cost per Cubic Foot*
12th St. & Avenue D	5,000	1907	$.12
12th St. & Avenue D	5,000	1904	.117
63rd St. & Avenue A	5,000	1923	.123

Correcting his tabulation for holders from 1900 to 1922, the average cost is not $.087 but $.1054, and the correct figure is thus approximately the same as the unit for all of the holders in the table, which is $.1185. In other words, the average unit cost of *all* of the appellee's holders compares favorably with the cost of what the Attorney-General regards as "modern" holders.

These smaller holders within Manhattan blocks are denounced now by the Attorney-General as inadequate, obsolete and inefficient, although he could not offer a word of sworn proof in support of such a charge. On the contrary, the proof shows that all of the holders are used and useful and excellently adapted to the distribution conditions under which they function.

As to the comparative efficiency between the two 5,000,000 cubic feet storage holders at the 11th Street station and a single 10,000,000 cubic feet holder (if there were room for it), Colonel Miller pointed out that it depended upon conditions, and that two holders might be more efficient (R. 1521). Colonel Miller also said that there would be no greater efficiency in having a single 1,600,000 cubic feet holder in place of the four 400,000 cubic feet holders at the 21st Street station, for the peculiar conditions at the 21st Street station justified and required the continuance of the existing holders (R. 1522-1523).

It is not a fact that the supersession of any of the appellee's holders would permit the sale of the land which they now occupy, or would permit the erection of "fewer and larger" holders. Retirement of existing Manhattan holders, in most instances, would mean another one of similar size, in the same place. The replacement of these holders would not enable the appellee to sell one square foot of land, and there is no evidence to the contrary in this record.

(III) As to the claim that the "contingencies reserve" of the appellee should be deducted, in some guise of "depreciation":

This matter was very thoroughly canvassed, in the prior rate suit of this appellee, and this Court decided that this "contingencies reserve" should not be deducted. The opinion of this Court in the New Jersey Telephone case made an incomparable statement of the reasons why not even a "depreciation reserve" should be deducted:

> "Customers pay for service, not for the property used to render it. Their payments are not contributions to depreciation or other operating expenses or to capital of the company. By paying bills for serv-

> ice they do not acquire any interest, legal or equitable, in the property used for their convenience or in the funds of the company. Property paid for out of moneys received for service belongs to the company just as does that purchased out of proceeds of its bonds and stock."

The appellant's statement of the history of the appellee's reserves is grossly inaccurate. That history was given fully in the record *in the prior suit*, as summarized therein at pages 461 to 470 of our Brief on the Facts. As there shown conclusively, this prudent reserve was not accumulated at the expense of rate-payers, but represented earnings well within the limits of a fair return but not distributed to stockholders.

See, also, the testimony of Mr. Brundage, in the present case, showing that the "contingencies reserve" was only a segregation of the appellee's surplus (R. 791).

No charge to provide for any "accrued" depreciation is included in the appellee's expenses or rates

The appellee does not burden its rates, or its consumers, with any charge for theoretical depreciation.

Since January 1, 1920, in accordance with a resolution of its Executive Committee (R. 816) the appellee has been charging to the operating account "Renewals and Replacements," and crediting the reserve account "Renewals and Replacements," 3½ cents per thousand cubic feet sold during each month. Since January 1, 1924, similar charges or credits have been made to the "Retirement Expense" and "Retirement Reserve" accounts (Ex. No. 253; R. 363), the new nomenclature having been prescribed by the defendant Commission (R. 721-722). The change from three

cents per thousand cubic feet prior to 1920, to 3½ cents per thousand cubic feet was made in view of the affirmed findings in the prior rate suit (R. 815-816).

This annual charge provides for the net cost of the retirements of property, as and when they occur, and equalizes their incidence reliably, from year to year. The actual retirements between 1905 and 1923, which were charged against the reserve representing renewals and replacements, amounted to 3.64 cents per thousand cubic feet sold (R. 817), as compared with the present equalizing charge of 3½ cents.

The Astoria Company (being only a manufacturing company not engaged in the distribution and sale of gas to consumers) charges for renewals and replacements one-half of one cent per thousand cubic feet made, and that represents a cost for renewals and replacements which enters into the charges by the Astoria Company to the appellee for the use of plant facilities (R. 818).

No deduction is made by the appellee for depreciation of plant, equipment or any other property in any of its tax reports, and no claim for it is made (see Tax Reports; *Defendants'* Exhibits Nos. 58 to 63).

The causes for which retirements of property take place

As already indicated on pages 305-06, *ante*, the record in the present case, or in the case of any other gas manufacturing and distributing concern, pictures a linked system of plants, pipes, tunnels, commercial buildings, and equipment, all composed of hundreds of millions of parts.

They will not all fail at once. Neither the property as a whole, nor any considerable part of it, is likely ever

to have to be rebuilt in any one year. Parts are replaced daily and charged to repairs. Where is the line between a repair and a replacement? The replacement of a bolt is the repair to a link of a conveyor; the replacement of a link is a repair to the conveyor; the replacement of a conveyor is a repair to the plant; the replacement of a plant is a repair to the system.

In such a system, the cost of replacements averages a nearly equal annual amount, and more nearly equal amount over a period of five years. All things are relative and what may be termed a replacement in a small shop may be termed a repair in a great combination of plants. No one would think of accumulating a depreciation reserve for the cost of yearly repairs, or would write off depreciation of small articles commonly replaceable in a year or less. The annual charges for repairs and replacements are enough to cover the costs of ordinary annual replacements. Why accumulate a reserve in advance when it is not necessary for the purpose? Why not deal with ordinary replacements as repairs are commonly dealt with, viz., as a self-equalizing charge to the operating expenses of the year?

As to major replacements, the superseding of large units of plant, equipment or distributing system, they are made for the purpose of serving a greater number of consumers or of serving existing consumers more efficiently and economically.

They thus result in economies and are intended to secure economies, and should be amortized over future years. *Present* consumers should not be asked to create a reserve to provide for something which will benefit them not at all and will save money only for future consumers.

The appellant's depreciation theory would add several cents uselessly to the required rate for gas

Counsel for the appellant demands a large deduction from the "rate base," because of *an assumed but unproved* depreciation. He is *silent* as to the other side of the picture, viz., that if such a deduction were made, six or seven cents more, per thousand cubic feet, would have to be added to the appellee's operating expenses, and so to the rate, on every thousand cubic feet of gas sold by it. Concerning the lack of candor of the Attorney-General's representatives in this respect, Special Master Gilbert, on the hearing of the prior suit of the *New York and Queens Gas Company* case, said, as to the testimony before him by the same witnesses in the *Consolidated Gas Company* case (Record in Case No. 296; October Term, 1921; pages 1198-99):

> "The Master: So that throughout these years you would say that this company, in addition to the ordinary repairs and replacements and the like, ought to have charged the consumers 6 or 6½ cents more for gas?
>
> "Witness Hine: In addition to repairs, not in addition to replacements. This only should take care of replacements. When they take out an engine for some reason or another, the fund would be charged with the cost of that engine.
>
> "The Master: *And you say by your exhibit that in addition to the 3 cents for replacements they ought to charge up about 6¼ cents or more to include accrued depreciation and replacements, and depreciate their plant every year as against that?*
>
> "Witness Hine: *They should lay aside that much to apply to accruing depreciation due to all causes to take care of the cost of property retired.*
>
> "The Master: You did not suggest any such item in the *Consolidated* case, did you?

"Witness Hine: I did not handle that end of it at all.

"The Master: Well, you did not suggest any such thing, did you?

"Witness Hine: No."

That Special Master's comment and conclusions as to this theory of increasing rates in order to justify an unwarranted deduction, was before this Court in 269 Fed. 277; affd. 258 U. S. 178.

No need for an additional burden on the rate

To burden present consumers each year with one-tenth of the cost of a new unit of plant, as the appellant's theory proposes, on the assumption that in ten years it will have to be superseded to make way for a unit which will produce the service *thereafter* in larger quantities or at a lowered cost, offends against sound economics and the matured view of this Court, in the *Kansas City Southern* case, that abandonments of this character should be charged to future earnings.

There is no need for putting an additional burden on the *present* rate, in order to accrue a fund equal to the cost of a plant or unit which may some day be superseded by a larger or more economical one; because *future,* not *present,* consumers will benefit thereby, and because the supersession will not take place until it is economical to make it, and then the resultant economies take care of the cost of the withdrawal and the supersession does not even add to the *future* rate.

To collect in advance the cost of the withdrawal not only means pure guess-work as to the period which will elapse before the time when, *if ever,* this unit in question will be

superseded with a more economical unit, but also means increased rates continuously meanwhile for consumers who may never derive any benefit from the withdrawal, and means the accrual of a fund which will not be needed at the time of the withdrawal because the economies from the supersession will take care of its cost.

As this Court said, in the *Pacific Gas and Electric Company* case, as to the cost of retiring property to make way for improved methods of production:

> "To provide for it out of previous revenues (before the retirement) was not imperative, if possible. Former consumers were not beneficiaries; only subsequent ones could be advantaged."

POINT TWENTY-THREE

ITEMS ELIMINATED BY MASTER FROM APPELLEE'S ACTUAL OPERATING EXPENSES

From the appellee's actual and indisputable operating expenses, the Master and the Court eliminated, for the purposes of this case, no less than $3,668,838.33 for 1922 and $2,732,779.31 for 1923 (R. 123, 124). Of the amounts so deducted for the year 1922, the sum of $1,275,768.60 represented items other than payments made by the appellee to affiliated gas companies for return on property, and included the total actual cost of the gas supply inspection, interest on consumers' deposits, rate case expenses, and expenses of Public Service Commission hearings, part of the actual cost of renewals and replacements, part of the gross earnings tax, all of the excess dividends tax, one-third of the real estate tax on Kings-

bridge land, the real estate of corporations tax, all of the Federal Income tax, and interest on unpaid taxes.

Of the amount deducted by the Master and Court from the appellee's 1923 actual operating expenses, a total of $513,196.90 represented like items of operating expense other than payments for return on property of others. The Federal income tax was deducted in 1922 only because there would have been no such tax applicable to appellee's gas business in that year, at the $1.00 rate (Ex. No. 813; R. 2316-2320). The Master did not deduct the 1923 Federal income tax, for the reason that upon the basis adopted by him, a tax attributable to the appellee's gas operations would have been incurred if Chapter 899 had been in effect, in excess of the amount actually paid by the appellee.

A list of the items which the appellee believes were unwarrantedly eliminated by the Special Master is set forth in appellee's Exception No. 1 to the Special Master's Report (R. 217, 218), and is as follows:

Contested items deducted from appellee's 1922 operating expenses

Gas supply inspection	$ 96,096.09
Interest on consumers' deposits	97,823.80
Rate case expenses	30,855.54
Expenses of P. S. C. hearings	43,491.65
Renewals and replacements	176,378.81
Deduction of gross earnings tax to amount based on a dollar rate instead of rate collected in 1922	24,457.25
Excess dividends tax	28,368.23
One-third of real estate tax on Kingsbridge land	1,833.33
Real estate of corporations tax	334,965.00
Federal income tax	312,357.90
Interest on unpaid taxes	129,141.00
	$1,275,768.60

Contested items deducted from appellee's 1923 operating expenses

Gas supply inspection	$100,101.06
Interest on consumers' deposits	94,032.42
Rate case expenses	85,158.06
Expenses of P. S. C. hearings	113.56
Renewals and replacements	53,960.53
Deduction of gross earnings tax, basing it on $1.00 rate instead of rate collected in 1923	12,856.63
Excess dividends tax	48,805.41
One-third of real estate tax on Kingsbridge land	1,826.66
Interest on unpaid taxes	115,042.57
Total	$ 513,196.90

(Pltf.'s Ex. Nos. 813, 816, 888, 889)

The corresponding items were also eliminated by the Master, in stating his "present cost" of gas, as of May 1, 1924 (R. Ex. No. 1017; R. 2828). It was not contested that the appellee actually expended the above-listed sums for the stated purposes, in connection with its gas business. It was not questioned that these expenditures were necessary and reasonable in amount. The eliminated items amount to large sums of money in this case and are substantial in comparison with appellee's total revenues and expenses. *They were excluded in what seems to us an excess of conservatism and erroneously as a matter of law.*

In discussing his deductions from the appellee's actual operating expenses for the years 1922 and 1923, the Special Master pointed out that in view of his basis of determination, he had eliminated "all inter-company charges" (R. 124) and that he may have been "unduly exacting" as to the other items excluded (R. 124).

In passing upon the Master's report, Judge Winslow said (R. 319-320):

> "In determining operating expenses, items open to controversy are eliminated, and operating expense is reduced to its lowest terms. But in view of the Court's conclusion that the act is unconstitu-

> tional, confiscatory and void, even with these debatable items decided by the Master against the plaintiff, it is not necessary for this Court to pass on these specific matters."

Because we believe the Master substantially understated the appellee's reasonable operating expenses, we shall discuss briefly the items which we think were erroneously excluded:

(1) Expense of gas supply inspection

In testing the adequacy of the rate under Chapter 899 of the Laws of 1923, with reference to the operations of the appellee at the time the statute was enacted, *i.e.*, the year 1923, there cannot be any question that the expenditure within that year for adjusting appliances on consumers' premises to render them suitable for the standard of gas prescribed by the order of the Commission, was directly imposed by the public authorities. It amounted to $100,101.06 in 1923 and $96,096.09 in 1922 (R. 773), and there is surely no ground upon which it could reasonably have been excluded from the operating costs of 1923.

Mr. Woods testified that further and additional inspections would be necessary before the appellee further lowered the thermal content of gas to the standard prescribed by the Commission, and that, if it should become necessary to adjust the consumers' appliances to 650 minimum B.t.u. standard, a much greater expenditure would be necessary than the total amount ($196,000) expended for the readjustment of appliances in the latter part of 1922 and early part of 1923. Mr. Rasch likewise testified (R. 911) that such a readjustment of appliances to the prescribed 650 B.t.u. standard would cost approximately double the sum ex-

pended in 1922-1923. In either event, the appellee will be obliged to continue expenditures of this nature. It should be borne in mind, also, that the extensive inspections during that period reduced to a minimum the normal adjustments regularly made of consumers' appliances, classified to "work on consumers' premises—adjusting and repairing."

It is apparent in respect to this item, that the appellant has abandoned entirely the 650 minimum B.t.u. standard, and urges the exclusion of the amount expended during 1923 for gas supply inspection, upon the basis that the expense will not continue. The cost of gas during the year 1923 and as of May 1, 1924, is before the Court as a basis for determining the cost of gas of the standard prescribed by the 1923 statute. If this expense be excluded from the reasonable present cost of the manufacture and distribution of gas of the standard now being supplied, then it would have to be added in a greater amount in determining the additional cost of supplying gas of the standard prescribed by the statute under review.

(2) Interest on consumers' deposits

This item represents outlays imposed upon the appellee by law.

The interest charged and paid on consumers' deposits is a current operating expense imposed upon the appellee by Section 63 of the New York Transportation Corporations Law. These deposits are not advance payments for gas.

In the prior suit of the *New York and Queens Gas Company*, this Court refused to strike out this item from the operating expenses.

The paring of operating expenses should not be extended to payments compelled by statute. The unsoundness of the Attorney-General's position is shown by the fact that he demanded that both this item and the cost of uncollectible bills be excluded.

If these payments of interest are to be held, in this case and for the purpose of this suit, not allowable as proper operating charges, then the Special Master correctly eliminated from miscellaneous operating revenue the interest received on bank balances and other items of interest.

Such an elimination of the interest on bank balances does not, however, offset the burden of expense arising from payment of the interest required by the statute.

(3) Expense of rate litigation in court

A practical view of *present-day* conditions requires the restoration and allowance of this item, as an act of justice and a salutary measure.

In deciding the *New York and Queens Gas Company* case, Judge Winslow said (1 Fed. [2nd], 351; appeal dismissed 268 U. S. 708), as to the Special Master's apportionment of the rate case expenses over a five-year period, where the operating expenses still exceeded the revenues (italics ours):

> "In arriving at his conclusions that the statutes are confiscatory, the Special Master has eliminated, for the purpose of this suit only, many items said by the plaintiff to enter into the cost of manufacture and distribution of gas which the plaintiff urges should be included in operating expenses. *He has, for illustration, spread the expenses of the rate case proceedings over a period of five years, assigning only one fifth thereof to the expenses of the year*

under consideration. Ordinarily this would, without question, be accepted as a wise and conservative adjustment. It would not be assumed that confiscatory legislative action would become a habit. The present enactment follows close on the heels of Court decision. The excessive cost of litigating the intricate and complex questions involved in the case at bar, and in similar cases, will fall, as usual, ultimately upon the individual consumer, and not upon the collective owners whom we denominate the corporation. *If it had been necessary, this Court would have directed that the expense of such litigation be included in the year when incurred."*

From this ruling of the District Court, the Attorney-General prosecuted no appeal (268 U. S. 708), yet despite this expression of the District Court's views, the Special Master in the present case not only did not include the rate case expenses in the years in which they were incurred, but did not even apportion them over a five-year period or any period. *On the contrary, he excluded rate case expenses altogether.*

Mr. Brundage presented a schedule (Plff's. Ex. No. 803 for Id.), setting forth the amount of the expenditures for gas rate litigation and for proceedings before the Public Service Commission from January 1, 1919, to December 31, 1923, but the Special Master refused to receive it in evidence (R. 823). This evidence showed that expenses of this character are substantial, recurring, virtually continuous, and tend to equalize themselves. The exclusion of this proof could, we submit, be justified only on the basis that, as Judge Winslow held, the expenses actually incurred in 1922 and 1923 should be included in the costs for those years; but this was not done (R. 123, 124).

We submit that exclusion of all rate litigation expense

from the appellee's operating expenses was most unjust. Exhibit No. 803 (for Id.) showed that this expense had been a recurring annual charge since 1919, and that the amounts incurred in 1922 and 1923 were no more than the normal average costs of recent years, all of which has been incurred in the protection of the investors' property from confiscation. There has been no question involved of reducing a rate claimed to be excessive.

When Chapter 899 was pending before the Legislature and Governor, the reiterated argument of its author was to the following effect:

> "*No harm* will be done to anyone (unless possibly the consumers) by enacting this bill. The companies can protect themselves. If the bill passes and the rate is found adequate, the consumers will get a lower rate, which they cannot possibly get if we don't pass this bill. If we pass it, and the rate is too low, no harm will be done to the gas companies, because they can protect themselves in Court. Give the consumers the benefit of the doubt."

This sort of reasoning led to the present anomalous situation, viz., that in the appellee's actual operating expenses for the years 1922 and 1923 were included *expenses caused by two different suits of exactly the same character, in the same Court.* Its expenses in freeing itself from the prior eighty-cent rate had not been liquidated, and final judgment for the taxable costs awarded in the prior suit had not in fact been entered, when new litigation as to a statutory rate was forced upon it.

One of the best ways to help discourage this indefensible tread-mill of litigation is to retain the cost of it as an allowable item of operating expenses. Unless and until that is done, the Legislature is free to enact and re-enact rate

legislation every two or three years, because the Court's disallowance of the expenses of the consequent litigation means that the companies' *stockholders and investors* have to bear the expense of resisting, year after year, these indefensible *enactments*, and the consumers, as such, go scot-free. Such a rule of law *makes the investors lose in any event.*

This is no longer an "infrequent" or "unusual" expense

In the rate suit of the *New York and Queens Gas Company* in 1920, this Court was led to exclude this item altogether from the computation because the Court did not at that time think that it then represented "a *usual* and necessary operating expense."

Judge Hand, in the appellee's prior suit, recognized that the item was one of which the cost should be borne by the consumers, but he apportioned it over a period of ten years, because he thought *at that time* that rate litigation in Court was to be deemed infrequent and that expenses therefor were incurred only rarely and at long intervals.

Judge Hughes in the *Brooklyn Borough Gas Company* case took the same view, and made the apportionment over a five-year period.

Experience has shown the lack of foundation for these previous rulings under which the expenses of rate litigation were either disallowed as exceptional or apportioned over long periods as infrequent.

The present-day view is that the amounts actually expended in any year should not be disallowed in part on any theory of allocation to other years, because about the same amounts will be found in those years.

Alpha Portland Cement Co. v. *Lehigh Nav. El. Co.*, P. U. R. 1924E, page 737; 24 Rate Research, pages 36, 39-40; decided by the Pennsylvania Public Service Commission on November 26, 1923;

New York and Richmond Gas Co. v. *Prendergast*, 10 Fed. (2nd) 167;

Re Consolidated Gas, El. Lt. & P. Co. of Baltimore, abstracted in P. U. R. 1924 B, page 684; 23 Rate Research, pages 176, 180; decided by the Maryland Public Service Commission on June 12, 1923;

Brooklyn Borough Gas Co. v. *Prendergast*, decided October 2, 1926.

The two Commissions above mentioned refused to amortize the expense of rate litigation over a five-year period, and held that the expenses should be included in operating expenses as incurred.

Nevertheless, the present Special Master excluded the item altogether.

(4) Cost of proceedings by and before the Public Service Commission

The situation as to this item is similar. It comes within the same sound and reasonable rule; viz., that if the State of New York passes laws or enacts regulations which place a burden of expense upon a utility for no fault or dereliction of its own, the costs thus imposed must be allowed as a part of operating expenses.

The proceedings before the Commission are part and parcel of the conditions under which the appellee must

conduct its business, as it is subjected to Commission regulation and supervision, and has no alternative but to do before the Commission when ordered to appear and no alternative but to meet the burden of expense which modern regulation entails.

Provision for such disbursements is prescribed *as a part of annual operating expenses*, in the National Uniform Classification of Accounts, established for gas and electrical corporations, in effect in more than twenty States, and adopted by the New York Commission and prescribed for gas and electric companies in this State by its Order of December 19, 1923 (Ex. 253; R. 363). Thus at the very time its counsel was urging, in the gas-rate litigation, the apportionment of this annual item of expense over a period of years, the defendant Commission, by its own act and orders, was definitely authorizing and requiring the inclusion of this expense, at its actual amount as and when incurred, in statements under oath as to the annual operating expenses of the gas and electric companies under its supervision.

The Public Service Commission Law now provides that in all rate proceedings the burden of proof shall be upon the gas company. There is a presumption that all orders and regulations made by the Commission are thereafter reasonable and valid.

If the appellee is to maintain its rights and protect its investors, as well as to adopt methods which in the judgment of its officers and directors are reasonable and adequate, it must participate in the proceedings before the Public Service Commission and must incur expenses in connection with those proceedings, including those of counsel, experts, minutes and other aids.

To do what the Special Master has done with this item leads to results which cannot be justified, in law or in sound accounting. In the *New York and Queens Gas Company* case, he took a single year's expense and apportioned it over five years, but did not apportion to 1922 and 1923 the proportion of such expenses incurred in the preceding years or the expenses in similar amounts which will be incurred in the subsequent years. In the present case, he excluded this item altogether.

(5) Renewals and replacements

As to this item, radically reduced by the Master, no contention was made by the defendants and no proof was adduced, to indicate that the appellee's actual annual charge for this purpose was or is excessive.

As shown on pages 312 and 313, *ante*, the appellee, since January 1, 1920, has been charging to the operating account known as "renewals and replacements," and crediting the reserve account "renewals and replacements," in accordance with a resolution of its executive committee, three and one-half cents per thousand cubic feet sold during each month (R. 816).

Since the taking effect of the National Classification of Accounts, prescribed by the defendant Commission, as of January 1, 1924, its changed nomenclature has been used, and similar charges and credits have been made to the "retirement expense" and "retirement reserve" accounts, respectively (R. 815).

The actual retirements of the appellee's property between 1905 and 1923, which were charged against the reserve representing renewals and replacements, amounted to 3.64 cents per thousand cubic feet sold (R. 817).

The Astoria Company charges for renewals and replacements one-half of one cent per thousand cubic feet made, and that represents a cost for renewals and replacements which enters into the charges by the Astoria Company to the Consolidated Company for the use of plant facilities (R. 818).

The appellee's retirement expense (or renewals and replacement expense, as it was designated prior to the Commission's new system of accounts) is an operating charge incidental to the use of its own property. Similar retirement expenses are applicable and incidental to the use of the property of affiliated gas companies which is used by the appellee. The total retirement expense applicable to the appellee's use of its own property and of the property of others must, therefore, include not only the appellee's own charges but also the charges of the affiliated companies applicable to the portions of their property devoted to the use of the appellee's consumers. The appellee does actually reimburse the affiliated companies for the portion of the retirement expense applicable to their property which is used by the appellee (Exhibit Nos. 815, 818; R. 2329, 2343).

The Special Master, however, excluded from his allowances of the operating expenses of the appellee the sums of $176,378.81 and $53,960.53 for the retirement expenses of the years 1922 and 1923, respectively, which were properly chargeable, and were in fact charged to the appellee on account of the use of properties of affiliated gas companies for the benefit of the appellee's consumers.

We respectfully urge that a statement of the operating costs incurred in serving the appellee's consumers would not be complete without restoring and including the above-stated sums of actual expense, and that their reduction or exclusion without evidence to justify it was error.

Ohio Utilities Co. v. *Ohio Public Utilities Commission*, 267 U. S. 359;

(6) Interest on unpaid taxes

On taxes withheld from payment for any reason, interest accrues under the law. When the taxes are paid, the interest has to be paid with them, and so it appears meanwhile on the utility's books as an operating expense. The amount shown on the books as an expense for any year is the amount *which has accrued during that year* on taxes remaining unpaid (Exs. Nos. 813, 817; R. 2320, 2334; 862-863).

We submit this reasonable principle:

If the statute requires interest to accrue and be paid to the State on unpaid taxes, and if the decisions of the Courts require, as they do, that a utility shall not burden its consumers by paying without question whatever taxes may be assessed against the utility by public authority, but shall contest for the consumers' benefit any taxes deemed to be improperly assessed or excessive in amount, then the utility is entitled to be allowed in its operating expenses, so that the consumers may pay, whatever interest on taxes has accrued during the period of contest in good faith.

(7) Excess dividends tax

This tax is assessed as a part of the gross earnings tax and represents an *additional* tax on gross earnings in the event of dividends being paid in excess of the prescribed exemption (Ex. Nos. 814, 817; R. 2320, 2334, 870-871). The tax law provides for this additional measure of taxation within the same paragraph and as a part of the gross earnings tax. The appellee has included in its operating expenses only that portion strictly applicable

to its gas operations, amounting to but approximately 20 per cent. of the total assessment. This tax is as indisputably an item of the appellee's gas operations as the real estate or special franchise taxes upon gas property.

POINT TWENTY-FOUR

DEFICIENCIES IN EARNINGS DUE TO RATES LIMITED BY STATUTE

The Special Master adhered (R. 140) to his previous ruling in the *New York and Queens Gas Company* case (1 Fed. [2nd] 351; appeal dismissed 268 U. S. 708), that he could not consider the claim of a utility to an allowance for its actual, enforced and inescapable deficiencies in earnings, due to rates limited by statute. His view was that this claim had been adversely determined by this Court (R. 140). Appellee's Exception No. 26 (R. 229) raised the question squarely for the reviewing Court, but the District Court did not deem it necessary to pass upon these additional elements (R. 319-320).

As we have already indicated under Point Twenty-one, *ante*, this matter of deficiencies during the period of struggle against statutory rates proved inadequate, has *nothing to do* with the allowance of *going value*. Furthermore, it has nothing to do with early deficits or pioneer losses. It is solely a question of fair play—the holding of the State accountable for its own deliberate acts.

Upon the trial of the present case, the Special Master refused to hold that the unamortized deficiency in that appellee's earnings, below a fair return, during the years 1917 to 1921, due to the failure of the rates chargeable by

that appellee, under the limitations prescribed by or pursuant to statute to furnish sufficient revenue to provide a fair return, constituted a proper element of the value of that appellee's property or should be amortized over a suitable period and provided for in the rate chargeable by that company, during 1923, 1924 and subsequent years.

The Special Master also refused to receive in evidence at all the tabulations which showed the amount of the deficiency thus inflicted upon the appellee, despite its diligent efforts to obtain relief from those oppressive and confiscatory limitations by public authority. Reference is made to Mr. Davidson's Exhibits Nos. 879 and 882 for Identification and to R. 1537-1541.

Exhibit No. 879 showed that the deficiency in earnings of the appellee alone, below a fair return upon its property, during this period of struggle for relief (1917-1921), amounted to no less than $53,744,481.85. An eight per cent. return upon this sum, without cumulation or compounding, would have required, during 1922, the sum of 20.89 cents, and during 1923, the sum of 17.87 cents, per thousand cubic feet of gas sold by the appellee.

Exhibit No. 882 presented a similar computation, also attested by Mr. Davidson (R. 1540-1541), as to the like deficiency in earnings of the appellee and its affiliated gas companies on the transfer system, during the same period. In other words, it was a *combined* statement for the system companies, as to whose operations, in other respects, the Special Master accepted combined statements for comparative purposes.

Importance of the item decided against the appellee

The aggregate deficiency of the system companies below an eight per cent. return upon even their investment

was shown by Exhibit No. 882 to amount to $45,722,815.08. An eight per cent. return upon this sum would have amounted to 10.82 cents in 1922 and 9.8 cents in 1923, on every thousand cubic feet of gas sold by the system companies.

These facts illustrate how large and consequential are many of the items which the Special Master eliminated altogether and refused to consider at all.

Pertinent legal principles

We respectfully submit that this precise question has not been decided by this Court and that any exclusion of this element from consideration proceeds from a failure to analyze closely the precise question involved:

(1) It is of course definitely settled that current or prospective losses may not be deemed offset or justified by earlier net earnings claimed now to be in excess of a fair return. The State has regulatory power over rates—the power and duty to reduce them if and when they become excessive. The proceeds of rates which the public authorities required or permitted the company to charge are now held to be "the property of the company"; the State may not be heard now to claim that such rates or the earnings thereunder were excessive (*Municipal Gas Co.* v. *Public Service Comm.*, 225 N. Y. 89, 99; *Newton* v. *Consolidated Gas Co.*, 258 U. S. 165). The *State* is then fairly estopped.

(2) By the same equitable principle, if a public utility establishes rates, or accepts and acquiesces in the continuance of rates, for its service, the utility may not subsequently claim that such rates inflicted losses—deficiencies below a full return—for which it may claim some manner of recoupment now. Rates which the utility promulgated

or voluntarily continued may not later be claimed by it to have been inadequate. The *utility* is then fairly estopped.

This much has been decided, but we do not believe that *either* of these two rulings controls or determines a *third* situation, as to which we do not think the final ruling has yet been made:

(3) That is the question of the right of the utility to recoupment, in present and future rates, for deficiencies due to the inadequacy of rates prescribed by public authority (*e.g.*, statute or Commission order), from which the utility struggles for emancipation. As to deficiencies, below an adequate return, during the time the utility was doing all in its power to prove the existing rates confiscatory and secure its right to charge compensatory rates, *then certainly the utility is not estopped from claiming recoupment because the utility did not acquiesce in the rate limitations. Is not the State estopped from refusing reimbursement?*

If a rate being charged for utility service is being litigated, upon a consumer's complaint that it is too high or the utility's complaint that it is too low, and if the Court or Commission fixes a rate to be charged and collected by the utility *pendente lite*, what happens if the final decision is that such rate so charged *pendente lite* was too high?

The Commission or Court requires the utility to repay to its consumers the difference, with interest, between the rate actually collected and the rate which should have been charged and collected, under the final decision. That is deemed *fair and equitable;* the State may protect the patrons of the utility, as well as the utility, by such a procedure, if the Court or Commission deems it proper.

But what of the reverse situation? If the public authority fixes and keeps in force rates which are finally proved

to have been confiscatory, and if the utility complains against them and does all in its power to get relief from them, but the Commission or Court nevertheless keeps such confiscatory rates in effect for a considerable period, thereby inflicting heavy loss, is there no equitable obligation to permit recoupment?

If the public regulatory authority "guesses wrong" and inflicts heavy losses upon a utility, despite all of the utility's efforts, is not there a public responsibility to make good those losses in the next rate revision, it having been judicially established that the rates prescribed by public authority were so low as to cause the losses?

The Special Master has indicated a view that this specific question has been answered in the negative, by recent decisions. We do not think this is necessarily so. In enunciating the equitable rules above stated, this Court does not seem to us to have yet indicated its ruling, on final adjudication, as to the situation presented where the losses are due to no fault or acquiescence of the utility.

Recent decisions of Federal and State Courts

Many State and Federal Courts are answering this question in a manner favorable to our contention. For example:

Hackensack Water Co. v. *Board of Utility Commissioners,* 119 Atl. 84 (N. J. Sup. Ct.; decided December 7, 1922; opinion by Swayze, J.);

Louisiana Water Co. v. *Public Service Commission of Mo.* (U. S. Dist. Ct. West Dist. of Mo.; Reeves, *D.J.;* decided December 11, 1923; reported 294 Fed. 954);

Petersburg Gas Co. v. *City of Petersburg,* 110 S. E. 533 (Va. Sup. Ct.);
Columbus Gas Lt. Co. v. *Pub. Serv. Comn.,* 140 N. E. 538 (Ind. Sup. Ct.; decided June 28, 1923);
Mobile Gas Co. v. *Patterson,* 293 Fed. 208 (Clayton, *D.J.;* decided October 31, 1923);
Streator-Aqueduct Co. v. *Smith,* 295 Fed. 385;
People ex rel. The Pennsylvania Gas Company v. *Pub. Serv. Comn. of New York,* 211 App. Div. 253 (decided Jan. 7, 1925).

An adverse decision on the present question does not seem to us to be compelled by the decision of this Court in the *Georgia Railway and Power Co.* case, decided on May 15, 1922. That appears from the facts disclosed in the District Court (278 Fed. 242), even though the District Court did not draw the distinction. If the utility company *makes no effort* to increase an inadequate rate, or if the company accepts, puts in effect and continues an inadequate rate fixed by the Commission, it might well be held that the consequences of such *voluntary* acts on the part of the company are a risk of the business and estop the utility from trying to recoup them.

The decision of the New York State Court in January of 1925

The situation here disclosed seems different in principle, as was pointed out by the Appellate Division for the Third Department, by Hinman, *J.*, in the *Pennsylvania Gas Company* case (211 App. Div. 253), construing the Public Service Commission Law of New York:

> "The Supreme Court has recently said that so-called losses from operations in recent years due to

insufficiency of previous rates are properly excluded. (*Georgia Ry. & Power Co.* v. *Railroad Commission of Georgia*, 262 U. S. 625.) It seems possible, however, that this decision was not aimed at losses due to no fault or acquiescence by the Company and resulting from rates fixed by public authority resisted by the Company and finally held to be inadequate, unjust and confiscatory. There have been later decisions holding that it is proper to make good those losses in the next rate revision. (*Petersburg Gas Co.* v. *Petersburg*, 132 Va. 82, 110 S. E. 533; *Columbus Gas Light Co.* v. *Public Service Commission* [Ind.], 140 N. E. 538; *Mobile Gas Co.* v. *Patterson*, 293 Fed. 208; *Hackensack Water Company* v. *Board of Public Utilities Commissioners* [N. J.], 119 Atl. 84; *Streator-Aqueduct Co.* v. *Smith*, 295 Fed. 385; *Louisiana Water Co.* v. *Public Service Commission of Missouri*, 294 Fed. 954). In *People ex rel. Adirondack Power & Light Corporation* v. *Public Service Commission* (200 App. Div. 268), we recognized the right of the Commission to make good any losses suffered under an unfair rate resisted by the Company."

These decisions, and others, sustaining the utility's right to reimbursement for losses inflicted by unjust rate limitations resisted by it, were, as is indicated by their dates above stated, filed subsequently to the decisions of this Court which have been suggested as establishing a contrary precedent. Especially the State courts seem bent on recognizing the utility's right.

In the *Hackensack* case, decided on December 7, 1922, the Supreme Court of New Jersey had the precise question before it. After ruling that *present value means present reproduction cost as at the time of the inquiry* (1921), not original cost or any averaged figure, the Court, per Swayze, *J.*, said:

> "The company makes another valid objection. The Board omitted to consider deficiencies in earnings accumulated under rates fixed by the commission which did not produce a fair return. The board relies upon the present decision of the United States Supreme Court in *Galveston Electric Company* v. *Galveston*, but this view of the effect of that decision seems erroneous."

Judge Swayze then proceeded with a clear and convincing explanation of the reasons why the present question should not be deemed adversely decided in the *Galveston Electric* case and why an allowance of this item is economically sound. We commend Judge Swayze's opinion as a complete presentation of the view which we urge as applicable here.

The period covered by Exhibits Nos. 879 and 882 for Identification was made up of years in which the appellee was denied a fair return *through no fault of its own.* In *prior* years, the rates and earnings permitted under State regulation are presumed to have been reasonable and neither more nor less than adequate. If the appellee earned less than a fair return, *during those years,* it was the *company's* fault, because it had an available remedy through resort to the Courts and failed to invoke that remedy.

From 1917 down, however, the fault was not the appellee's. The appellee was doing all it could to obtain speedy redress from the statutory rate which had become grossly confiscatory. The Legislature had deliberately taken away from the Public Service Commission any power to increase gas rates above the statutory figure; and, when the company went to Court to obtain relief, the public authorities of the State, including the Public Service Commission, did all in their power to retard and delay the obtaining of final judg-

ment and the emancipation of the company from the statutory restriction. *The appellee was doing all it could to speed the day when it could promulgate an adequate rate.*

The deficiency in earnings during these years being, therefore, due to the acts and conduct of the State authorities, and not to any fault or omission of the appellee, it became and was, in 1923, the duty and obligation of the rate-revising power of the State, as we see it, not to reduce the appellee's rates thereafter to such a point as would deny the appellee reimbursement for these enforced losses. Instead of that, however, the Legislature enacted the statute here under review, which has been shown to be confiscatory beyond a doubt.

POINT XXV

THE DECREE OF THE DISTRICT COURT SHOULD BE AFFIRMED.

New York, October 15, 1926.

Respectfully submitted,

SHEARMAN & STERLING,
Solicitors for Appellee.

WILLIAM L. RANSOM,
JACOB H. GOETZ,
Of Counsel.